



भारत का राजपत्र

The Gazette of India

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

OK 8/4/86

सं० 8] नई दिल्ली, शनिवार, फरवरी 22, 1986 (फाल्गुन 3, 1907)
No. 8] NEW DELHI, SATURDAY, FEBRUARY 22, 1986 (PHALGUNA 3, 1907)

इस भाग में निम्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके
(Separate paging is given to this Part in order that it may be filed as a separate compilation)

भाग III—खण्ड 2

[PART III—SECTION 2]

(रक्षा मंत्रालय को छोड़कर) भारत सरकार के मंत्रालयों और उच्चतम न्यायालय द्वारा जारी की गई
सरकारी भक्तियों की नियुक्तियों, पदोन्नतियों, छुट्टियों आदि से सम्बन्धित अधिसूचनाएं
[Notifications regarding Appointments, Promotions, Leave etc. of Government Officers issued
by the Ministries of the Government of India (other than the Ministry of Defence) and by the
Supreme Court]

THE PATENT OFFICE
PATENTS AND DESIGNS

Calcutta, the 22nd February 1986

ADDRESS AND JURISDICTION OF OFFICES OF THE PATENT OFFICE

The Patent Office has its Head Office at Calcutta and Branch Offices at Bombay, Delhi and Madras having territorial jurisdiction on a zonal basis as shown below :—

Patent Office Branch,
Todi Estates, 3rd Floor,
Lower Parel (West),
Bombay-400 013.

The States of Gujarat, Maharashtra, and Madhya Pradesh, and the Union Territories of Goa, Daman and Diu and Dadra and Nagar Haveli.

Telegraphic address "PATOFFICE".

Patent Office Branch,
Unit No. 401 to 405, 3rd Floor,
Municipal Market Building,
Saraswati Marg, Karol Bagh,
New Delhi-110 005.

The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan and Uttar Pradesh and the Union Territories of Chandigarh and Delhi.

Telegraphic address "PATENTOFIC".

1—467 GI/85

Patent Office Branch,
61, Wallajah Road,
Madras-600 002.

The States of Andhra Pradesh, Karnataka, Kerala, Tamilnadu, and the Union Territories of Pondicherry, Laccadive, Minicoy and Amindivi Islands.

Telegraphic address "PATENTOFIS".

Patent Office, (Head Office),
214, Acharya Jagadish Bose Road,
Calcutta-700 017.

Rest of India.
Telegraphic address "PATENTS".

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

Fees :—The fees may either be paid in cash or may be sent by Money Order or Postal Order, payable to the Controller at the appropriate Offices or by bank draft or cheque, payable to the Controller drawn on a scheduled bank at the place where the appropriate office is situated.

CORRIGENDA

(1)

In the Gazette of India, Part III, Section 2 dated the 5th January, 1985 under the heading "PATENTS SEALED" delete 145387.

(2)

In the Gazette of India, Part III, Section 2 dated the 5th January, 1985 under the heading "PATENTS SEALED" delete 145398.

APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE 214, ACHARYA JAGADISH BOSI ROAD, CALCUTTA-700 017

The dates shown in crescent brackets are the dates claimed under Section 135 of the Act.

16th January, 1986

28/Cal/86. Clouth Gummiwerke Aktiengesellschaft. Rail Support.

29/Cal/86. Spetsialnoe Konstruktorskoe Bjuro Gidroimpul'snoi Tekhniki Sibirskogo Otdelenia Akademii Nauk SSSR. Worktable for an apparatus for explosion working of materials.

17th January, 1986

30/Cal/86. Dalmia Institute of Scientific & Industrial Research and Orissa Cement Limited. Process for the manufacture of silica refractory bricks.

31/Cal/86. Luis Gonzaga Quinhones Godinho. High precision electronic thermostatic controller for general application.

32/Cal/86. TLV Co. Ltd. Gas-water separator.

33/Cal/86. (1) Ivan Ivanovich Zozulya, (2) Andrei Fedorovich Gresko, (3) Anatoly Stepanovich Kostyrko, (4) Mikhail Ruvimovich Ovsischer, (5) Vladimir Fedorovich Reutsky, (6) Ivan Danilovich Krivosheev, (7) Alexei Andreevich Lavrinenko, (8) Jurij Ivanovich Golovlev, (9) Leonid Kuzmich Slobodyanuk, (10) Vasily Ivanovich Ivanus. Process for producing powder-like sulphur preparations.

34/Cal/86. Bankamerica Corporation. High detergent/dispersant content lubricant additive for use in alcohol fuel burning engines.

35/Cal/86. The Regents of the University of California. High strength high ductility, low carbon dualphase steel product. [Divisional date 1st February, 1983].

20th January, 1986

36/Cal/86. Beloit Corporation. Multi-disk refiner.

37/Cal/86. Kawasaki Jukogyo Kabushiki Kaisha. Engine control system interlocked with clutch mechanism.

38/Cal/86 Klein, Schanzlin & Becker Aktiengesellschaft. A servo-actuated valve fitting.

21st January, 1986

39/Cal/86. University of Queensland. Conversion of sucrose to ethanol using the bacterium *Zymomonas mobilis*. (Convention dated 25th January, 1985) Australia and (22nd February, 1985) Australia.

40/Cal/86. Siemens Aktiengesellschaft. Low voltage circuit breaker with a current transformer.

41/Cal/86 Vijay Paul. An optical sighting device.

42/Cal/86. Melvin Millard Melton. Rodent Trap.

43/Cal/86. Midrex International B.V. Rotterdam. Apparatus for generating a reducing gas and for reducing iron oxide. [Divisional date 1st June, 1983].

APPLICATION FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, MUNICIPAL MARKET BUILDING, 3RD FLOOR, KAROL BAGH, NEW DELHI-110 005

1st January, 1986

1/Del/86. Council of Scientific and Industrial Research. "A process for the manufacture of insulating brick from rice husk ash".

2/Del/86. Council of Scientific and Industrial Research. "A process for the manufacture of high alumina refractory brick from sillimanite beach sand".

3/Del/86. Shri Ram Institute for Industrial Research. "A process for the preparation of 2-ethyl hexyl chloroformate".

4/Del/86. Shri Ram Institute for Industrial Research. "A process for the preparation of peroxy dicarbonates".

5/Del/86. Shri Ram Institute for Industrial Research. "A process for the preparation of N-octyl chloroformate".

6/Del/86. Saurabh Natverlal Kinariwala. "A traverse drum".

2nd January, 1986

7/Del/86. Hari Krishan. "Rotary stirring three-in-one".

8/Del/86. Shri Ram Institute for Industrial Research. "A process for the polymerization of unsaturated monomers".

9/Del/86. NL Industries, Inc. "A method of drilling a well". (Convention date 16th November, 1981) (U.K.).

10/Del/86. Gosudarstvenny Proektiro-Konstruktorsky I Eksperimentalny Institut Po Obogatitelnomu Oborudovaniyu "GIPROMASHOBOGASCHENIE". A aerator of a flotation machine".

11/Del/86. Champion Spark Plug Europe. S.A. "Improved wiper blade".

12/Del/86. Velsicol Chemical Corporation. "A process for the preparation of urea compounds". [Divisional date 15th April, 1983].

3rd January, 1986

13/Del/86 Gopaldas Khandelwal. "Improvements in or relating to corrugated cardboard boxes".

14/Del/86. Jitender Gupta. "Gas carburetor".

15/Del/86. Sham L. Tickoo. "Super grip adjustable wrench".

16/Del/86. Kennecott Corporation. "Multi hubbed separable blade agitators".

6th January, 1986

17/Del/86. Aaloke Surie. "Improvement in or relating to grinding and polishing head".

18/Del/86. Aaloke Surie. "Improvement in or relating to manual platform polishing machine".

19/Del/86. Sumiter Choudhary. "A cooling system in the moving vehicle i.e., Railway Compartments, Buses, Cars etc.".

20/Del/86. Institut National Des Sciences Appliquees De Lyon. "Composite material for construction purposes based of pozzuolanas and glass fibers and processes for manufacturing same".

7th January, 1986

- 21/Del/86. The Goodyear Tire & Rubber Company, "Method of manufacturing partially crystalline polyester articles".
- 22/Del/86. Imperial Chemical Industries PLC., "Apparatus for effecting gas liquid contact". (Convention date 18th January, 1985) (U.K.).
- 23/Del/86. Portex Instrumentation & Controls, "A circuit breaker".

8th January 1986

- 24/Del/86. Bayer Aktiengesellschaft, "Process for the production of 4-nitrodiphenylamines".

9th January, 1986

- 25/Del/86. Alan Elgar Herbert Ellis, "Lockable drive mechanism". (Convention date 15-1-1985) (U.K.).
- 26/Del/86. Eastway Holdings Ltd., "Method of securing the stator of an electrical machine".

10th January, 1986

- 27/Del/86. Vivek Mull, "A peak flow monitor".
- 28/Del/86. Oil & Natural Gas Commission, "A subsurface pressure gauge".

APPLICATION FOR PATENTS FILED AT THE PATENT
OFFICE BRANCH, 61, WALLAJAH ROAD,
MADRAS-600 002

6th January, 1986

- 4/Mas/86. Veejay Lakshmi Engineering Works Private Limited. Improvement in or relating to yarn guides in a ring twisting frame.
- 5/Mas/86. Veejay Lakshmi Engineering Works Private Limited. Improvements in or relating to ring twisting frame.
- 6/Mas/86. Union Carbide Corporation. Use of acyl urea compounds for controlling endoparasites and ectoparasites of warm-blooded animals.

7th January, 1986

- 7/Mas/86. Mobil Oil Corporation. A catalytic dewaxing process and a catalyst composition for use in the same.
- 8/Mas/86. Furukawa Denchi Kabushiki Kaisha (also known as the Furukawa Battery Co., Ltd.) & Honda Giken Kogyo Kabushiki Kaisha (also known as Honda Motor Co., Ltd.). Storage Battery.

8th January, 1986

- 9/Mas/86. K. S. G. Doss. Improvements relating to extraction of sugar from sugarcane. Steam-aided imbibition.
- 10/Mas/86. Amco Batteries Limited. Dry-charge process for lead acid battery negative plates using water-miscible organic liquids.
- 11/Mas/86. Mitsubishi Belting Ltd. Power Transmission Apparatus.

9th January, 1986

- 12/Mas/86. Flakt Aktiebolag. A discharge electrode.

10th January, 1986

- 13/Mas/86. C. Kalachari. A device for generating electricity using buoyancy of water.
- 14/Mas/86. Corning Glass Works. Method of making sodium-containing glass or ceramic.
- 15/Mas/86. Monsanto Company. Improved partially oriented nylon yarn and process.

COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of Patents on any of the applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed along with the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

"The classifications given below in respect of each specification are according to Indian Classification and International Classification."

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying as the copying charges per page are Rs. 4/-.

CLASS : 176

157262

Int. Cl. : F 23 k 5/00.

FLUID INJECTOR.

Applicant : PEABODY HOLMES LIMITED, A BRITISH COMPANY, OF TURNBRIDGE, HUDDERSFIELD HD 6RB, ENGLAND.

Inventor : BARRY JAMES COHEN, JOSEPH SCARAMUZZA AND GRAHAM TOCK.

Application for Patent No. 504/Del/81 filed on 10th August, 1981.

Convention date 22nd August, 1980/8027477 (U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

9 Claims

A fluid injector comprising a valve housing, an injector assembly including discharging means for discharging fluid from the injector assembly, ducting for conveying said fluid between said valve housing and said discharging means and a control valve movable to a first position in response to flow of said fluid in a first direction through said ducting to close said discharging means and return said fluid from said discharging means to said valve housing and movable to a second position in response to flow of said fluid in a second direction through said ducting to open said discharging means to allow at least some of the fluid conveyed to said discharging means to be discharged therefrom and to return any surplus fluid to said valve housing inlet and outlet passages in a said valve housing for conveying said fluid into and from said valve housing, a change-over valve in said valve housing comprising a valve member adjustable into a first position to condition the injector for flow of said fluid from said inlet passage through said ducting in said first direction and into a second position to condition the injector for flow of said fluid from said inlet passage through said ducting in said second direction, and a spill return valve in said housing for varying the proportion between the amount of fluid that is allowed to discharge from said discharging means and the amount that is returned from said discharging means to said valve housing when said control

valve is in its said second position said spill return valve comprising a valve member separate from said change-over valve and adjustable relative to fluid flow restricting means by means of which both the flow of fluid from the spill return valve to the injector assembly and the flow of fluid from the injector assembly to the spill return valve can be varied simultaneously.

Compl. specn. 19 pages.

Drg. 3 sheets.

CLASS : I29 N

157263

Int. Cl. : B 23 k 1/02.

AN IMPROVED PROCESS FOR SOLDERING COPPER AND FERROUS WORK PIECES.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJI MARG, NEW DELHI-110 001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : NANDA DULAL DAS, BAIDYA NATH MISHRA & SUKUMAR JANA.

Application for Patent No. 506/Del/81 filed on 11th August, 1981.

Complete specification left on 10th November, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

5 Claims

An improved process for soldering copper to ferrous work pieces comprising coating the work piece joints with a paste made of tin-lead solder powder and a mixture of zinc chloride and ammonium chloride dissolved in an alcohol or water and subjecting the same to heat at a temperature in the range of 180° to 220°C.

Provisional specn. 4 pages.

Compl. specn. 8 pages.

CLASS : 40H

157264

Int. Cl. : B 01 j 7/00.

APPARATUS AND METHOD FOR THE SIMULTANEOUS PRODUCTION OF HYDROGEN AND CARBON MONOXIDE SEPARATELY OR AS A GASEOUS MIXTURE.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, OF RAJI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860) AND SELSKAPET. FOR INDUSTRIELL OG TEKNISK FORSKNING VED NORGES TEKNISKE HOGSKOLEN, A NORWEGIAN RESEARCH INSTITUTE, OF N 7034 TRONDHEIM-NTH, NORWAY.

Inventors : SURENDRA KUMAR SAXENA, KEDAR NATH GUPTA.

Application for Patent No. 518/Del/1981 filed on 14th August, 1981.

Complete Specification left on 13th August, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

22 Claims

Apparatus for the simultaneous production of hydrogen and carbon monoxide either separately or as a gaseous mixture by the reaction within a molten metal bath of solid, liquid or gaseous carbonaceous or hydrocarbon substances and oxygen, which apparatus comprises a substantially well-shaped reaction vessel provided internally with a lining of refractory material and adapted to contain said molten metal bath, the upper end or roof of said vessel being formed integrally with two funnel-like outlets, said vessel being provided internally with a central core extending substantially horizontally from one vertical face to the opposite

vertical face whereby said core effectively partitions the interior of the vessel into first and second reaction chambers each located below its respective funnel-like outlet, said chambers connecting with each other by means of a pair of channels formed by the provision within the vessel of said central core, said channels being located between the top of the core and the roof of the vessel and between the bottom of the core and base of the vessel respectively, both said channels being located beneath the level of the molten metal bath, said first and second reaction chambers each being provided also below the surface of the metal bath with one or more means for the injection into said chambers of solid, liquid or gaseous reactants.

Provisional Specification 20 pages.

Complete Specification 28 pages.

Drg. 1 sheet.

CLASS : 172C₁

157265

Int. Cl. : D 01 g 15/40.

AN IMPROVED APPARATUS FOR FEEDING FIBERS TO TEXTILE PROCESSING EQUIPMENT.

Applicant : AUTOMATIC MATERIAL HANDLING, INC., OF HIGHWAY 274, BESSEMER CITY, NORTH CAROLINA, U.S.A. A CORPORATION OF THE STATE OF NORTH CAROLINA, UNITED STATES OF AMERICA.

Inventors : ALEX JACQUES KELLER & AKIVA PINTO.

Application for Patent No. 603/Del/81 filed on 17th September, 1981.

Complete specification left on 23rd August, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

11 Claims

An improved apparatus for feeding fibers to textile processing equipment of the kind such as herein mentioned said apparatus including an axially extending rotatable opening roller and a substantially enclosed fiber collecting chute means extending generally downwardly beneath said opening roller said chute means having an open upper end extending along and parallel to the axis of said opening roller to receive fibers as they leave said opening roller and having a wall extending generally downwardly from said open end with a width substantially equal to said axial extent of said opening roller, wherein the improvement comprises :

- (a) perforations formed in said chute wall in an arcuate area extending across the width thereof and extending above and below the normal level of fibers collected in said chute; and
- (b) means for generating a current of air that flows around the upper of said roller and generally tangentially therefrom toward said perforations to entrain said fibers leaving said opening roller and to assist in equalising the level of fibers collected in said chute across the width thereof.

Provisional specn. 9 pages.

Drg. 2 sheets.

Compl. specn. 12 pages.

Drg. 3 sheets.

CLASS : 24D₁

157266

Int. Cl. : B 60 t 17 00.

HYDRAULIC BRAKE BOOSTING DEVICE.

Applicant : ESCORTS LIMITED, H-2 CONNAUGHT CIRCUT, NEW DELHI-110001, INDIA, AN INDIAN COMPANY.

Inventors : MADAN MOHAN MEHTA, SUNIL KUMAR CHAUDHARY & LADHU RAM CHAUDHARY.

Application for Patent No. 626/Del/81 filed on 30th September, 1981.

Complete specification left on 2nd December, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

3 Claims

A hydraulic brake boosting device for a vehicle comprising a brake booster coupled with a master cylinder, said brake booster being supplied with oil from an oil tank through a flow control means, said oil tank being connected to a bi-directional gear pump means for clockwise and anti-clockwise direction corresponding to the movement of wheels of said vehicle, said pump means having two ports and a vent line joining said tank, said two ports being connected to said brake booster having two ports, first port being connected to said flow control means and second port of said booster connected to said oil tank, said master cylinder being connected to a piston in said brake booster, a gap being maintained between said piston and valve rod for flow of oil from said first port to said second port such that when brakes are applied said gap closes and thereby pressure is developed in said booster causing actuation of said master cylinder through said piston, release of said brakes relieves the pressure in said booster and said piston returns to the original position.

Provisional specn. 7 pages.

Compl. specn. 10 pages.

Drg. 4 sheets.

CLASS : 14 B

157267

Int. Cl. : Holm 1/06, 29/00.

"A LEAD ACID BATTERY".

Applicant : JAI KRISHAN SEHRA, OF D1/10, MAYA-PURI INDUSTRIAL AREA, PHASE-II, NEW DELHI-110 064, INDIA, AN INDIAN NATIONAL.

Inventor : JAI KRISHAN SEHRA.

Application for Patent No. 650/Del/81 filed on 12th October, 1981.

Complete specification left on 23rd October, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

11 Claims

A lead acid battery of the sealed type comprising a battery housing having a plurality of positive and negative plates disposed in an alternate relationship to each other with a separator disposed between each of said negative and positive plates characterized in that said separators comprises a porous absorbant material for absorbing the electrolyte, a gas vent provided with said battery and having a pressure release vent plug, said plates consisting of a mixture or alloy of lead, antimony and arsenic or its alloys.

(Provisional specification 5 pages)

(Complete specification 10 pages)

Drawing 2 sheets

CLASS : 48 A₄

157268

Int. Cl. : H 01 b 13/02.

"METHOD AND APPARATUS FOR MANUFACTURING FLEXIBLE STANDARD BODIES".

Applicant : BICC LIMITED, A BRITISH COMPANY OF 21 BLOOMSBURY STREET, LONDON WC1B 3QN, UNITED KINGDOM.

Inventors : PHILIP DEY, DAVID ALEXANDER & BERNARD GAYLARD.

Application for PATENT NO. 664 Del/1981 filed on 13th October, 1981.

Convention date 18-10-1980/33698 (U.K.)

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch New Delhi-110005.

24 Claims

A method of manufacturing a flexible stranded body of the kind described, which method comprises causing a preformed elongate member of metal or metal alloy of approximately U-shaped transverse cross-section to travel in the direction of its length; feeding into the space bounded by the U-shaped elongate member at least one optical fibre in such a way that the rate of advance of the or each fibre is restrained; transversely folding or otherwise shaping the advancing U-shaped elongate member in such a way as to form a substantially circumferentially rigid central core having a closed elongate compartment within and extending throughout the length of the core in which the or each advancing optical fibre is loosely housed; injecting water-impermeable medium of a grease-like nature into the elongate compartment under a controlled pressure, the consistency of the greasy water-impermeable medium, the pressure and rate at which it is injected into the compartment and the degree of restraint imparted to the or each advancing optical fibre being such that, in a predetermined length of the stranded body, the length of the or each optical fibre exceeds the length of the elongate compartment by a controlled extent and the space within the elongate compartment not occupied by the or each optical fibre is substantially filled with water-impermeable medium in a greasy state; and helically winding around the central core so formed at least one layer of bare elongate elements of metal or metal alloy.

Compl. specn. 21 pages.

Drg. 1 sheet.

CLASS : 24 D I

157269

Int. Cl. : B 60 t, 17/00.

"BRAKE BOOSTER".

Applicant : AUTOMOTIVE PRODUCTS LIMITED, A BRITISH COMPANY OF TACHBROOK ROAD, LEAMINGTON SPA, WARWICKSHIRE, CV31 3ER, ENGLAND.

Inventor : WALTER WILLIAM BAILEY.

Application for Patent No. 695/Del/1981 filed on 2nd November, 1981.

Convention date 13-11-80/80.36550, (Great Britain).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

4 Claims

A brake booster comprising a housing divided into two chambers by a movable wall, valve means responsive to a booster input load for controlling a differential pressure across said wall to provide a proportionately increased output load, and at least one tie bar accommodated in a re-entrant portion of the booster periphery for transmitting reaction loads from said output to said input.

Complete specn. 9 pages.

Drg. 1 sheet.

CLASS : 68 E₂ & 126 D

157270

Int. Cl. : G 05 F-3/04.

A DISCHARGE CIRCUIT FOR RAPIDLY ELIMINATING CHARGE TRAPPED IN A CAPACITOR VOLTAGE DIVIDER USED FOR MONITORING HIGH VOLTAGE AC.

Applicant : ALSTHOM-ATLANTIQUE, OF 38 AVENUE KLEBER, 75794 PARIS CEDEX 16, FRANCE, A FRENCH COMPANY.

Inventor : JEAN PIERRE DUPRAZ.

Application for Patent No. 697/Del/1981 filed on 3rd November 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch New Delhi-110005.

5 Claims

A discharge circuit for rapidly eliminating charge trapped in a capacitor voltage divider used for monitoring high voltage AC, said voltage divider comprising a capacitor column connected in series with a base capacitance having a capacitance ratio such that a small part of the high voltage appears across the base capacitance characterised in that said discharge circuit comprises a diode rectifier bridge having AC terminals and DC terminals, said AC terminals being connected in parallel with the base capacitance, and two identical inductor windings, one connected in parallel with a first diode of the bridge and the other connected in parallel with a second diode of the bridge which second diode is itself directly connected together with the first diode to the same AC terminals of the diode bridge.

Compl. specn. 15 pages.

Drg. 1 sheet.

CLASS : 179 C

157271

Int. Cl. : A 61 k 9/00.

A PROCESS FOR PRODUCING A PHARMACEUTICAL CAPSULE HAVING ENTERIC PROPERTIES.

Applicant : CAPSUGEL A.G., OF ENGELGASSE 11, CH-4010 BASEL, SWITZERLAND, A SWISS COMPANY.

Inventor : KURT EDUARD HERSERGER AND PETER SPHISER.

Application for Patent No. 816/Del/1981 filed on 30th December, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch New Delhi-110005.

11 Claims

1. A process for producing a pharmaceutical capsule having enteric properties, which comprises the following steps;

- A. mixing an aqueous dispersion of ultra-fine film-forming polymers, selected from a group consisting of cellulose esters, cellulose ether esters and acrylic resins, plasticizers or a mixture of plasticizers; viscosity-increasing auxiliary substances such as herein described and anti-foaming agents such as herein described
- B. dipping pre-warmed metal pins into the dispersion and lifting the pins out at a constant speed, the dispersion adhering to the pins being allowed to drip off for a defined length of time and the dispersion subsequent being transformed, during rotation of the metal pins and under controlled temperature and humidity conditions as herein described into a coherent film; and
- C. stripping the coherent film from the pins so as to form a wall of the capsule.

Compl. specn. 14 pages.

CLASS : 80 A + K

157272

Int. Cl. : CO 2b-1/00, B01d-35/00.

A FILTRATION APPARATUS.

Applicant : PRESSURE COOKERS AND APPLIANCES LIMITED OF F-101, MAKER TOWERS, CUFFE PARADE, BOMBAY-400 005, MAHARASHTRA, INDIA, AN INDIAN COMPANY.

Inventors : (1) HARI DUTT VASUDEVA, (2) LT. GEN. SURENDRA NATH SHARMA, & (3) NARENAMULPURAM SANKARAN SUBRAMANIAN.

Application No. 296 Bom/1982, Filed November 2, 1982.

Complete after provisional left on January 30, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972), Patent Office, Bombay Branch.

10 Claims

A filtration apparatus comprising a vessel, having a lid or cover member held in air-tight relationship thereto, a water filtration unit, held within the vessel and suspended from the lid member, said water filtration unit comprising an outer hollow member open at its lower end and housing a hollow water filtration candle, secured to said hollow member at its top end thereof, said candle having a riser tube positioned in the hollow portion thereof, the upper end of the riser tube, being in flow communication with a discharge tube, through a regulator housing secured to the top of the lid of the vessel, said lid also having a known type pressure vent valve.

Compl. specn. 13 pages.

Drg. 1 sheet.

Provisional specn. 7 pages.

Drg. Nil

CLASS : 129 K

157273

Int. Cl. : 23 g-3/00.

AN IMPROVED TAPPING ATTACHMENT AND/OR TAP HOLDING DEVICE.

Applicant & Inventor : MUKESH SHANTILAL PATIL, 19 AMRAKUNJ SOCIETY, SURENDRA MANGALDAS ROAD, AMBAVADI, AHMEDABAD-380 015, GUJARAT, INDIA.

Application No. 348/Bom 82 filed December 31, 1982.

Complete after provisional left April 5, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972), Patent Office, Bombay Branch.

4 Claims

An improved tapping attachment and/or tap holding device comprising a driving spindle to be mounted on a drilling machine or similar single spindle or multi-spindle machine, a clutch connected to the said driving spindle at one end and a tap holder at the other end, the said clutch consisting of an outer, clutch part provided with a plurality of balls partly projecting out of an inner circumferential groove of the said outer clutch part, and engaging into the grooves provided at equal angular distance, along the outer periphery of an outer sleeves of an inner clutch part which is rotatably mounted in a bearing and having an inner sleeve to hold the tap holder, a ball retaining ring provided in the said outer clutch part, for retaining the said balls partly engaged in the grooves of the outer sleeve of the inner clutch part. at a predetermined pressure, a spring loaded pressure plate provided above the said balls retaining ring and cupnut to adjust the spring pressure over the said pressure plate in accordance with the torque required to tap the hole in a workpiece, arrangement being such that during operation when the torque on the tap increases the predetermined value the said balls move radially out of the grooves in the inner clutch part thus stopping the drive being transmitted to the tap and preventing the damage to tap or any other part/s.

Compl. specn. 9 pages.

Drg. 1 sheet.

Provisional Specification 4 pages, Drawings Nil.

CLASS : 170D

157274

Int. Cl. : C 11 d-13/00.

AN IMPROVED PROCESS FOR PREPARING SOAP BARS HAVING MODIFIED PHASES AND SOAP BARS OBTAINED THEREBY.

Applicant : HINDUSTAN LEVER LIMITED, OF HINDUSTAN LEVER HOUSE, 165/166, BACKBAY RECLAMATION, BOMBAY-400 020, MAHARASHTRA, INDIA.

Inventors : (1) TERENCE ALLAN CLARKE, (2) RICHARD BARRIE EDWARDS AND (3) GRAEME NEIL IRVING.

Application No. 103/Bom/1983 filed March 25, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972), Patent Office, Bombay Branch.

10 Claims

An improved process for preparing soap material having modified phases which comprises subjecting said soap material to processing conditions where the structure of the phases are changed characterised by passing the said soap material through a series of shear zones/areas formed between a set of opposed discs/plates arranged within an enclosure each said disc/plate having a set of apertures, one set of said series of disc being rotatable during the process in relation to other set of said series of discs, the temp. of the soap material being generally between 30° and 55°C.

Comp. specn. 14 pages.

Drg. 1 sheet.

CLASS : 49 H

157275

Int. Cl. : A 47 j—27/08.

PRESSURE COOKERS.

Applicant : PRESSURE COOKERS AND APPLIANCES LTD., F-101 MAKER TOWERS, CUFFE PARADE, BOMBAY-400 005, MAHARASHTRA, INDIA. AN INDIAN COMPANY.

Inventor : DR. NARANAMMALPURAM SANKARAN SUBRAMANIAN.

Application No. 104/Bom/1983, filed on March 25, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office, Bombay Branch.

2 Claims

A pressure cooker of the type referred to characterised in that the straight wall portion of its lid or cover portion of its lid or cover upper portion of which is made to bulge upwardly forming a dome has a height of 0.5 inch or 1.27 cms. and in that a metal handle bar secured to the lid or cover is extended and formed with a downwardly curved end remote from the handle, the said curved end being disposed above and near the inwardly projecting lip or flange on the top of the body of the pressure cooker but without touching the flange or lip, when the lip or cover is fitted in the opening in the body and fixed in position.

Compl. specn. 8 pages.

Drg. 1 sheet.

CLASS : 80 A +K

157276

Int. Cl. : C 02 b—1/00, Bold 39/00.

A FILTRATION APPARATUS.

Applicants : PRESSURE COOKERS & APPLIANCES, LTD., F-101, MAKER TOWERS, CUFFE PARADE, BOMBAY-400 005, MAHARASHTRA, INDIA.

Inventors : (1) HARI DATT VASUDEVA, (2) JET. GEN. NARENDRA NATH SHARMA, (3) N. S. SUBRAMANIAN.

Application No. 297/Bom/1982 filed November 2, 1982.

Complete after Provisional left on January 30, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972). Patent Office, Bombay Branch.

12 Claims

A filtration apparatus comprising a vessel having a lid or cover member held in air tight relationship thereto, a water filtration unit held within the vessel and suspended from the lid member, said water filtration unit comprising a water filtration disc held within a housing, a riser tube secured to the lower end of the housing, in flow communication with the lower surface, of the water filtration disc, the upper surface of the water filtration disc being in flow communication with a regulator housing secured to the top of the said lid, a water discharge tube, secured to said regulator housing in flow communication thereof, said lid also having, a known type pressure vent valve.

Compl. specn. 10 pages.

Drg. 1 sheet.

Provisional specn. 6 pages.

Drg. Nil.

CLASS : 116 G

157277

Int. Cl. : B 66 b 5/00.

AN AUTOMATIC BATTERY OPERATED EMERGENCY ELEVATOR OPERATING DEVICE.

Applicant & Inventor : SUBRAMANIAM VISWANATHAN, F-101 NO. 41-B, MUNIAL NAGAR, No. 2, CHEMBUR, BOMBAY-400 089, MAHARASHTRA, INDIA.

Application No. 331 Bom 82 filed December 14, 1982.

Complete after provisional left April 20, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972). Patent Office, Bombay Branch.

9 Claims

An automatic battery operated emergency elevator operating device comprising of a high power D.C source connected to a set of plurality of relays and D.C. step up unit and control board contractors to cause to make the elevator to move to the nearest upper floor in the event of the absence of the mains power supply; the said device to come into operation giving simultaneous visual indications inside the elevator, after a predetermined delay of time with the help of a timer and inching device, characterised in that the above said components of the operating device are connected as per the circuit diagram shown in figure 2 of the accompanying drawings such that the said device operates the elevator in the said condition to move to nearest upper floor and stop there and will not operate further till the said regular mains power supply is again restored.

Compl. specn. 7 pages.

Drg. 2 sheets.

Prov. specn. 5 pages.

Drg. Nil.

CLASS : 13 A

157278

Int. Cl. : B 31 b 33/00.

AN IMPROVED FOLDING PLASTIC BASKET.

Applicant : MAHESH C. SAYANI AND MAHENDRA C. SAYANI OF PLASTILLA, 91, S. V. ROAD, BORIVLI (WEST), BOMBAY-400 092, MAHARASHTRA, INDIA.

Inventor : MAHESH C. SAYANI.

Application No. 162/Bom/1983, filed on 12 May, 1983.

Complete after Provisional left on 8 March, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972), Patent Office, Bombay Branch.

8 Claims

An improved folding plastic basket comprising a central rectangular base 1, 2, 3, 4 the length and breadth of such base having approximately broader and narrower rectangular adjacent sections respectively, said sections having curved edges at their extreme, characterised in that the broader sections 5, 6 along the length 1, 4 and 2, 3 of the said base forming the two vertical sides being provided with plurality of holes and narrower sections 9 and 10 along the breadth 1, 2, and 3, 4 of the said base, forming the other two vertical sides, being provided with plurality of studs, such that the said basket is assembled when required, by fastening the said studs on the narrower sections into the said holes on the broader sections and dis-assembled by separating the said studs from the respective holes, when not in use.

Compl. specn. 10 pages.

Drg. Nil

Provisional specn. 7 pages.

Drg. 4 sheets.

CLASS : 32F₂b+55E₄

157279

Int. Cl. : C 07 d—35/00, A 61 k—27/00.

A PROCESS FOR THE PREPARATION OF 9, 10-DIMETHOXY-3-METHYL-2-(2', 6'-DIMETHYL-4'-CARBOXYPHENYL)-IMINO-2, 3, 6, 7-TETRAHYDRO-4H-PYRIMIDO (6, 1-a) ISOQUINOLIN-4-ONE.

Applicant : HOECHST INDIA LIMITED, OF HOECHST HOUSE, NARIMAN POINT, 193 BACKBAY RECLAMATION, BOMBAY-400 021, MAHARASHTRA, INDIA, AN INDIAN COMPANY.

Inventor : DR. BANSI LAL, (2) MR. JUIIUS ANTHONY MASCARENHAS, (3) DR. JURGEN RFDCL AND (4) DR. NOEL JOHN DE SOUZA.

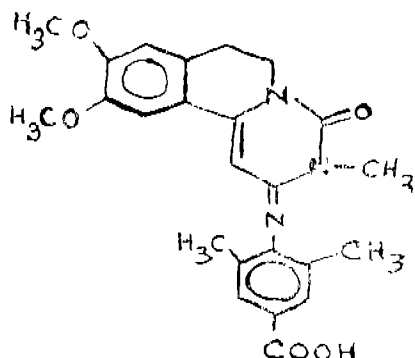
Application No. 192 Bom/1983 filed on June 9, 1983.

Complete after Provisional left on May 24, 1984.

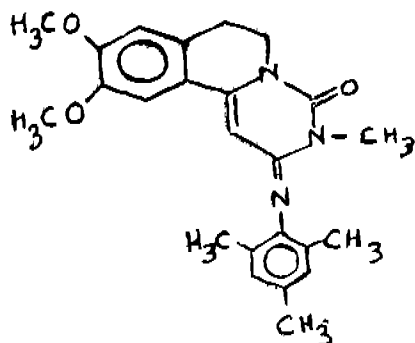
Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972), Patent Office, Bombay Branch.

2 Claims

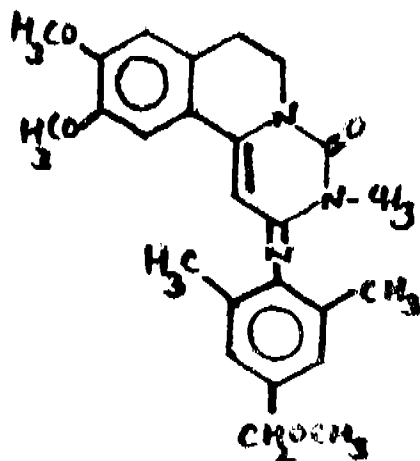
A process for the preparation of 9, 10-dimethoxy-3-methyl-2-(2', 6'-dimethyl-4'-carboxyphenyl) imino-2, 3, 6, 7-tetrahydro-4H-pyrimido (6, 1-a) isoquinolin-4-one of the formula VII.



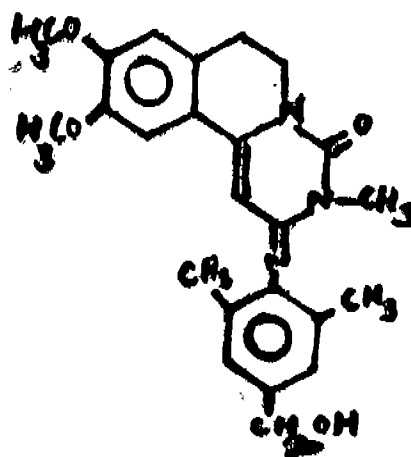
said process comprising oxidising 9, 10-dimethoxy-3-methyl-2-(2', 6'-dimethyl-4'-carboxyphenyl) imino-2, 3, 6, 7-tetrahydro-4H-pyrimido (6, 1-a) isoquinolin-4-one of the formula I



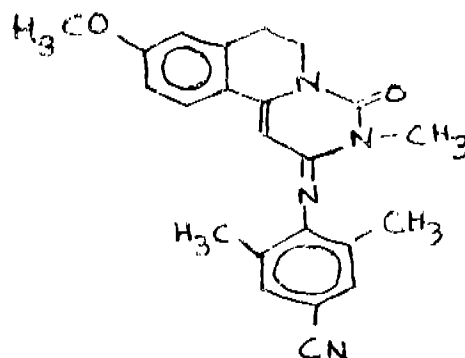
with an oxidising agent such as 2, 3-dichloro-5, 6-dicyano-1, 4-benzo-quinone (DDQ) in an organic solvent such as benzene, dioxane or ethanol at temperature ranging from 50°C to the boiling point of the solvent and filtering and refluxing the complex with zinc chloride in methanol to obtain a compound of the formula II



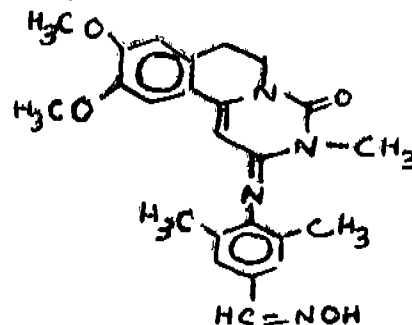
treating the compound of the said formula II with HCl at a temperature between 90°C to 100°C to obtain a compound of the formula III



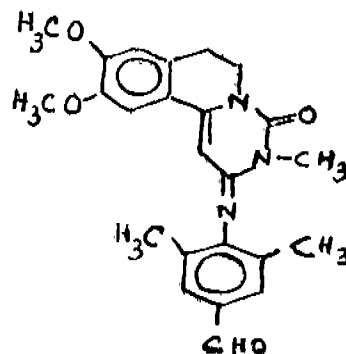
treating the compound of the said formula III with pyridinium chlorochromate in methylene chloride to obtain a compound of the formula IV



condensing the compound of the said formula IV by refluxing the compound of the said formula IV with hydroxylamine hydrochloride in the presence of pyridine and ethanol to obtain a compound of the formula V



converting the compound of the said formula V to a compound of the formula VI



by treatment with acetic anhydride at a temperature between 135°C to 140°C, hydrolysing the compound of the said formula VI with sodium hydroxide solution in ethanol to obtain the compound of the said formula VII.

Compl. specn. 8 pages.

Drg. Nil.

Prov. specn. 8 pages.

Drgs. 2 sheets.

CLASS : 32F₂b, 55E₄

157280

Int. Cl. : C 07 d-57/00, A61k-27/00.

A PROCESS FOR THE PREPARATION OF NOVEL PHARMACOLOGICALLY ACTIVE PYRIMIDO (4, 5-b) INDOLE DERIVATIVES AND THEIR PHARMACEUTICALLY ACCEPTABLE ACID ADDITION SALTS.

Applicant : HOECHST INDIA LIMITED, OF HOECHST HOUSE, NARIMAN POINT, 193 BACKBAY RECLAMATION, BOMBAY-400 021, MAHARASHTRA, INDIA, AN INDIAN COMPANY.

Inventors : (1) DR. BINDUMADHAVAN VENUGOPALAN, (2) DR. PRFMANAND DURGARAO DESAI, (3) DR. ALIHUSSEIN NOMANBHAI DOHADWALLA, (4) DR. NAND KUMAR KESHAVRAO DADKAR AND (5) DR. NOEL JOHN DE SOUZA.

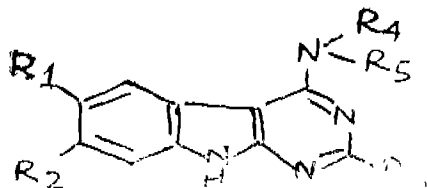
Application No. 226/Bom/1983 dated July 15, 1983.

Complete after Provisional left on May 24, 1984.

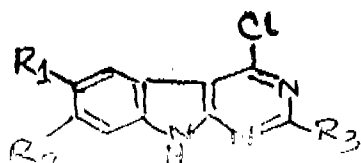
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

3 Claims

A process for preparing pyrimido (4, 5-b) indole derivatives of the formula I



wherein R₁ and R₂ which may be the same or different, stand for hydrogen, hydroxy, alkoxy and halogen; R₃ stands for hydrogen, alkyl, substituted alkyl, amino; R₄ and R₅ which may be the same or different stand for hydrogen, alkyl, cycloalkyl, dialkylaminoalkyl, aralkyl, alkyl amino, dialkylamino and optionally substituted aryl; R₁ stands for hydrogen when R₂ stands for hydroxy, amino, alkylamino, arylamino, R₁ and R₃ when taken together with the nitrogen atom to which they are bound stand for an optionally substituted nitrogen heterocycle possibly containing a further nitrogen or oxygen atom and their pharmaceutically acceptable acid addition salts said process comprising reacting a 4-chloro-pyrimido (4, 5-b) indole of the formula II



in which R₁, R₂ and R₃ are as defined above with a compound of the formula III



in which R₄ and R₅ are as defined above in a solvent such as herein described and at a temperature between 35–150°C and separating and purifying the resulting compound of the said formula I from the reaction mixture in a known manner and, if desired, converting the compound of the said formula I into its pharmaceutically acceptable acid addition salt in a known manner.

Compl. specn. 16 pages.

Drg. Nil.

Prov. specn. 14 pages.

Drgs. 2 sheets.

2-467 GI/85

CLASS : 129G + J

157281

Int. Cl. : B 23 p-3/00.

IMPROVEMENTS IN ROLL-BOND PROCESS WITH BUILT-IN PASSAGE OF DISSIMILAR MATERIALS.

Applicants : BONDUCT PROCESSORS PVT. LTD., 39/55, FRANDWANF, LANE NO. 9, PRABHAT ROAD, PUNE 411 004, MAHARASHTRA, INDIA.

Inventors : (1) PANDURANG RAGHUNATH ABHYANKAR & (2) ARUN GANESH JOSHI.

Application No. 229 Bom/1983 filed on July 20, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

2 Claims

Improvements in roll-bond process with building passage of dissimilar materials comprising, providing the passage of tubing component made of material distinctly different than basic material characterised in that the said passage or tubing of dissimilar material is incorporated in the form of nearly flat passage or tubing component in between two layers of parent material, the formed panel is thus roll-bonded in the known manner while the flattened passage of the said dissimilar material is subjected to inflating process by injecting fluid under pressure through one opening in the said passage or tubing while keeping the entire panel between two platens with a fixed pre-determined gap to allow limited inflation of the passage or tubing.

Compl. specn. 6 pages.

Drgs. 2 sheets.

CLASS : 53D₁, F₄

157282

Int. Cl. : A 61 k-27/14, C 07 g-5/00.

A PROCESS FOR THE ISOLATION OF A PHARMACOLOGICALLY ACTIVE SUBSTANCE HAVING THE STRUCTURE OF A CHROMONE ALKALOID FROM PLANT(S) BELONGING TO THE MELIACEAE FAMILY.

Applicant : HOECHST INDIA LIMITED, OF HOECHST HOUSE, NARIMAN POINT, 193 BACKBAY RECLAMATION, BOMBAY-400 021, MAHARASHTRA, INDIA, AN INDIAN COMPANY.

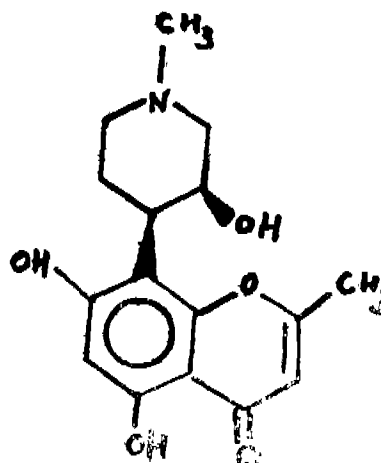
Inventors : (1) SUJATA VASUDEV BHAT, (2) VIRBALA SHAH, (3) ALIHUSSEIN NOMANBHAI DOHADWALLA, (4) SADASHIV SHANTARAM MANDREKAR, AND (5) NOEL JOHN DE SOUZA.

Application No. 248/Bom 1983 filed on 11 August, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

6 Claims

A process for the isolation of a pharmacologically active substance having the structure of a chromone alkaloid represented by the formula



from plant(s) belonging to the Meliaceae family, said process comprising extracting dried and ground parts such as herein described of said plant(s) with an organic solvent such as herein described and recovering the pharmacologically active substance from the solvent extract in known manner and, if desired, converting the pharmacologically active substance into its pharmacologically acceptable salts in known manner.

Prov. specn. 7 pages.
Compl. specn. 11 pages.

Drgs. 2 sheets.
Drgs. 1 sheet.

CLASS : 170 B

157283

Int. Cl. : C₁₁ d 3/12.

ABRASIVE AGGLOMERATES FOR USE IN SCOURING CLEANING COMPOSITIONS.

Applicant : HINDUSTAN LEVER LIMITED, 165/166, BACKBAY RECLAMATION, BOMBAY, MAHARASHTRA, INDIAN COMPANY INCORPORATED UNDER THE INDIAN COMPANIES ACT, 1913.

Inventor : PETER LEONARD DAWSON.

Application No. 264/Bom/1983, filed on August 26, 1983.

Convention Country dated 1st September 1982 (8224944) and 19th July 1983 (8319441) Great Britain.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

24 Claims

A scouring cleaning composition comprising an abrasive agent consisting of agglomerates of finely divided abrasive material having no particles of initial size above 20 micrometers and at least 80% by weight of initial size below 10 micrometers, and an organic binder as herein described for agglomerating the abrasive material the weight ratio between the abrasive material and the organic binder being within the range of from 1 : 1 to 97 : 3, which composition may additionally have a known cosmetic base.

Compl. specn. 22 pages.

Drg. Nil.

CLASS : 55E4 + F

157284

Int. Cl. : A 61 K-27/00.

DIETARY AND PHARMACEUTICAL USES OF METHYLSULFONYLMETHANE AND COMPOSITIONS COMPRISING IT.

Applicant & Inventor : ROBERT JOHN HERSCHLER, AMERICAN NATIONAL 3080 N.W. 8TH AVENUE, CAMAS, WASHINGTON-98607, U.S.A.

Application No. 265/Bom/1983 filed on August 29, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

8 Claims

A process for the manufacture of a pharmaceutical composition adapted for oral ingestion having a reduced gastrointestinal upsetting effect comprising forming an intimate physical mixture suitable for oral ingestion of a gastrointestinal upset promoting but otherwise physiologically acceptable pharmaceutically active agent as herein described alone with a gastrointestinal upset ameliorating effective amount of methylsulfonylmethane (MSM).

Compl. specn. 10 pages.

Drg. Nil.

CLASS : 32F1 + 32F2 b

157285

Int. Cl. : A61k 27/00, C07c-15/14.

A PROCESS FOR THE PREPARATION OF NOVEL CHEMOTHERAPEUTIC BISAMIDINE DERIVATIVES OF DIPHENYL AND PHARMACEUTICALLY ACCEPTABLE SALTS THEREOF.

Applicants : HOECHST INDIA LIMITED, HOECHST HOUSE NARIMAN POINT, 193 BACKBAY RECLAMATION, BOMBAY-400 021, MAHARASHTRA, INDIA.

Inventors : (1) DR. BINDUMADHAVAN VENU-GOPALAN, (2) DR. BOMI PATEL, (3) DR. DIPAK KUMAR CHATTERJEE, (4) DR. HIMAL NARESH GANGULI AND (5) DR. NOEL JOHN DE SOUZA.

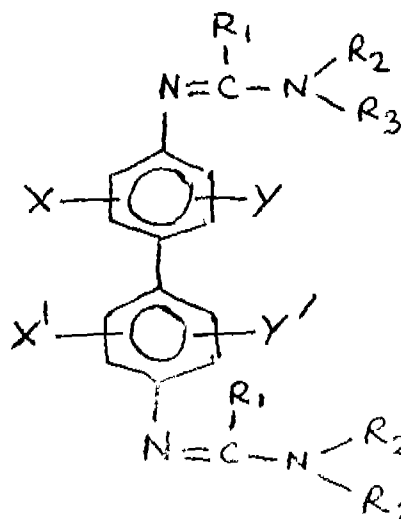
Application No. 285/Bom/1983 filed September 16, 1983.

Complete after Prov. left on December 12, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

4 Claims

A process for the preparation of novel chemotherapeutic bisamidine derivatives of diphenyl of the formula I



in which X/X' stands for C₁-C₃ alkyl groups, for example, methyl or ethyl; C₁-C₃ alkoxy group, for example, methoxy or ethoxy; halogen, for example, fluorine, chlorine or bromine or a group such as CF₃, SO₂CH₃, Y/Y' stands for usual aromatic substituents such as halogen, for example, fluorine, chlorine or bromine or C₁-C₃ alkyl group, R₁ stands for hydrogen, alkyl group or substituted alkyl group and each of R₂ and R₃ when taken together with the nitrogen atom to which they are bound stand for a heterocyclic group, and R₁ and R₂ when taken together with the carbon atom and the nitrogen atom to which they are bound stand for a nitrogen heterocycle optionally substituted by an alkyl group or substituted alkyl group or acyl group or aryl group at one or more positions in the heterocycle and R₃ stands for hydrogen, alkyl group or substituted alkyl group or acyl group and their pharmaceutically acceptable salts said process comprising reacting an appropriately substituted benzidine with phosphorous oxychloride and an appropriately substituted amide of the formula R₁CNR₂, R₃ to obtain a compound of the said

formula I and separating the compound of the said formula I from the reaction mixture in known manner and if desired converting the compound of the said formula I into a pharmaceutically acceptable salt in known manner.

Prov. specn. 8 pages.

Drgs. 1 sheet.

Compl. specn. 11 pages.

Drgs. 1 sheet.

CLASS : 112B+F

157286

Int. Cl. : H01k 1/00.

AN IMPROVED LUMINAIRE FOR ELECTRIC TUNGSTEN HALOGEN INCANDESCENT LAMP.

Applicants : MRS. VASANTPRABHA KANTILAL SHAH, MRS. NIRMALA CHHOTALAL SHAH, MRS. VEENA AVINASH KULKARNI, DINKAR SHANTILAL MEHTA, BIPIN NAGINDAS DOSHI, RAJAN NAGINDAS DOSHI AND MRS. IIA MAHENDRA SHAH, TRADING AS LUMEX ENGINEERING CORPORATION, 61, "SHAHNESH", DADABHOY ROAD, SANTACRUZ (WEST), BOMBAY-400 054, MAHARASHTRA, INDIA.

Inventor : AVINASH DATTATRAYA KULKARNI.

14 Claims

Application No. 316/Bom/1983 filed October 10, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

2 Claims

An improved luminaire for electric tungsten halogen incandescent lamp consisting of a housing having a hinged door at its front side, to permit insertion or removal of the halogen lamp therein, the hinged door having a toughened glass panel in it, a halogen lamp mounted on end contacts fixed to the two ends inside the housing, reflectors being provided at the rear and at each end of the halogen lamp the said, each end contact of the halogen lamp consists of one or more ceramic pieces provided with a spring and a silver coated copper slug positioned in a hole along the axis of the ceramic pieces and a connecting electrical wire having a high temperature insulation thereon connecting the said copper slug to junction box, each of the said end contact placed in a gap in the housing being held in position by a heat sink plate.

Compl. specn. 7 pages.

Drgs. 1 sheet.

CLASS : 179 G

157287

Int. Cl. : B 65 d—41, 56.

IMPROVEMENTS IN OR RELATING TO A BOTTLE OR FLASK HAVING SUCKING TUBES.

Applicant : EAGLE FLASK PRIVATE LIMITED, AN INDIAN COMPANY, EAGLE ESTATE, TALEGAON-410507, MAHARASHTRA, INDIA.

Inventor : ALMOHAMMED CHHAGAN PADAMSEE.

Application No. 3 Bom/1984 filed on 2 January 1984.

Complete Specification left on 16th March, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

3 Claims

A bottle or a flask having a top lid adapted to be screwed or press-fitted on the top of the bottle or flask at its mouth and having a hole with projections around for screwing or press-fitting a nipple to cover the said hole, characterized in that a spring loaded sucking tube is provided within the said hole of the said top lid, one end of the said sucking tube ending at the bottom of the bottle or flask and the other end projecting out of the said hole in the said top lid; one end of the said spring is fitted to the body of the sucking tube by a circlip, the other end of the said top lid; one end of the said spring is fitted to fixing means, such that the sucking tube can be depressed into the bottle or flask against the spring tension; a nipple covering the hole through which sucking tube is projecting out in the said lid and adapted to be screwed or press-fitted over the said hole, said nipple covering the top opening of the said sucking tube, such that the sucking tube projects out of the said hole of the said lid, when the nipple is removed from the said top opening, because of release of the tension of the spring.

Prov. specn. 3 pages.

Drg. Nil.

Compl. specn. 5 pages.

Drgs. 1 sheet.

CLASS : 9-F; 31-C

157288

Int. Cl. : B 01 j 17/30, 17/34, 17/36.

AN IMPROVED MULTIPLE CELL PHOTORESPONSIVE AMORPHOUS DEVICE.

Applicant : ENERGY CONVERSION DEVICES, INC., OF 1675 WEST MAPLE ROAD, TROY, MICHIGAN-48084, UNITED STATES OF AMERICA.

Inventors : 1. STANFORD ROBERT OVSHINSKY, 2. MASATSUGU IZU.

Application No. 1005/Cal/81 filed September 7, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

An improved multiple cell photoresponsive amorphous device having at least two cells joined to one another, at least one of the cells comprising an amorphous multi-layered alloy as herein described having an active photo-responsive region comprising a band gap layer upon which radiation can impinge to produce charge carriers, said alloy incorporating one density of states reducing element in at least one layer thereof, said element being silicon, characterized by at least one layer of said alloy (140a, 145b, 146c, 166a, 168b, 168c, 184, 187, 191, 209a, 209b, 209c, 211a, 211b, 211c) having a band gap adjusting element as herein described incorporated therein without substantially increasing the states in the gap, said alloy layer having a band gap adjusted for a specified photoresponse wavelength function different from said other cell.

Compl. specn. 66 pages.

Drg. 4 sheets.

CLASS : 9-F; 31-C

157289

Int. Cl. : B 01 j 17/30, 17/34, 17/36.

METHOD AND APPARATUS FOR MAKING AN AMORPHOUS MODIFIED GLASS MATERIAL.

Applicant : ENERGY CONVERSION DEVICES, INC., OF 1675 WEST MAPLE ROAD, TROY, MICHIGAN-48084, UNITED STATES OF AMERICA.

Inventors : 1. STANFORD ROBERT OVSHINSKY, 2. VINCENT DAVID CANELLA, 3. MASATSUGU IZU.

Application No. 1006/Cal/81 filed September 7, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

75 Claims

A method for making an amorphous modified glass material, comprising the steps of providing a cooling substrate as herein described forming a host matrix material as herein described on said substrate directing at least one fluid material as herein described comprising at least one modifier material as herein described in a stream toward said substrate in a direction such that said stream of said at least one modifier material converges with said host matrix material independently controlling in a manner described herein the flow and quench rates of said stream; providing for relative movement between said substrate and said stream of modifier material; and maintaining said substrate at a cooling temperature which, in conjunction with said relative movement, flow and quench rate of said modifier material cools the combined host matrix and modifier materials as they make contact with one another at a quenching rate of from 104°C to at least 108°C per second or more thereby to form a ribbon of modified amorphous glass material as herein described in which the optical and electrical transport properties and the number and type of electronic configurations can be controlled, thereby controlling the orbital relationships between said host matrix material and said modifier material.

Compl. specn. 43 pages.

Drg. 1 sheet.

CLASS : 25-B

157290

Int. Cl. : C 04 b 35/14.

AN IMPROVED PROCESS FOR THE MANUFACTURE OF SUPER-DUTY SILICA BRICKS.

Applicant : KUMARDHUBI FIRECLAY AND SILICA WORKS LIMITED, CHARTERED BANK BUILDING, CALCUTTA-700001, WEST BENGAL, INDIA.

Inventors : 1. DR. DWARKA NATH NANDI, 2. DR. GYAN DHAR SINGH.

Application No. 1215/Cal/81 filed October 31, 1981.

Complete specification left on 13th January, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

2 Claims

An improved process for the manufacture of super-duty silica bricks which comprises subjecting a silicious raw material made up of Vein quartz in amounts 25% to 55% by weight and Silica stone in amounts of 45% to 75% by weight to a step of preparing a wet mix of the raw material with sufficient amount of water, shaping the wet mix to the desired shape and subjecting to firing at usual firing temperatures, and wherein the particle size of vein quartz is most advantageously of a size of less than —35 mesh or a combination of particles of size of —35 mesh size forms the major fraction and particles of size of —35 to +60 mesh forming the minor fraction, the silica stone being advantageously made up of 2 size fractions, one of —16 to +35 mesh size particles and another of —8 to —35 mesh size particles.

Provisional specn. 4 pages.

Drg. Nil.

Compl. specn. 9 pages.

Drg. Nil.

CLASS 33-A

157291

Int. Cl. : B 22 d 11/06.

MACHINE FOR MANUFACTURING METALLIC STRIPS OR BANDS PARTICULARLY STRIPS OR BANDS OF ALUMINIUM OR AN ALUMINIUM ALLOY.

Applicant : SCAL SOCIETE DE CONDITIONNEMENTS EN ALUMINIUM, OF 47, RUE DE MONCEAU-75008, PARIS, FRANCE.

Inventor : SERGE BERCOVICI.

Application No. 1473-Cal/81 filed December 29, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

11 Claims

A machine for manufacturing metallic strips or bands particularly strips or bands of aluminium or an aluminium alloy comprising a pair of rolls driven in opposite directions, a nozzle for feeding molten metal or alloy between the said rolls, means for lubricating the surface of the rolls and means for varying the speed of rotation of the rolls characterized in that means are provided on the shaft or extension of one of the rolls for measuring frequency of variations in torque on the said shaft or extension, further means are provided for continuously comparing the said frequency with a reference frequency and reducing the speed of rotation of the rolls and increasing the rate of flow of the lubricant supplied by valves to the rolls when the frequency of variations is greater than the reference frequency until the frequency or torque variations is again lower than the reference frequency and remains in such condition for a predetermined interval of time, and for increasing the speed of rotation of the rolls as long as the said frequency of variations remains below the reference frequency.

Compl. specn. 16 pages.

Drg. 1 sheet.

CLASS : 33-C & F

157292

Int. Cl. : B 22 c 1/12, 3/00.

A REUSABLE MOLD AND ITS METHOD OF USE FOR FOUNDED METAL.

Applicant : ABEX CORPORATION, 530 FIFTH AVENUE, NEW YORK, NEW YORK 10036, U.S.A.

Inventor : ROBERT H. BEETLE.

Application No. 129-Cal/82 filed February 3, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

4 Claims

A reusable mold for founding metal such as iron and steel comprising a rigid cavity represented by metal confining exterior walls surrounding the mold cavity and substantially uniformly composed of a glass-ceramic such as spodumene, $\text{Li}_2\text{Al}_2\text{O}_4\text{SiO}_2$, and cordierite, $2\text{MgO} \cdot 2\text{Al}_2\text{O}_3 \cdot 5\text{SiO}_2$, in which the predominant microstructure is polycrystalline ceramic existing as a single phase microstructure, said walls, which are surrounded by either the ambient air or particulate heat sink medium such as steel shot, sand and clay, dissipating the heat of the casting in part by radiation.

Compl. specn. 8 pages.

Drg. 1 sheet.

CLASS : 32-F₂c

157293

Int. Cl. : C 07 c 129/02.

AN IMPROVED PROCESS FOR THE PRODUCTION OF GUANIDINE NITRATE.

Applicant : THE FERTILIZER (PLANNING & DEVELOPMENT) INDIA LTD, C.I.F.T. BUILDINGS, P.O. SINDRI, PIN 828122, DIST. DHANBAD (BIHAR), INDIA.

Inventors : 1. DR. PASUPATI GHOSH, 2. DR. SATYENDRA VARMA.

Application No. 407/Cal/82 filed April 13, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

8 Claims

An improved process for the manufacture of guanidine nitrate from urea and ammonium nitrate which improvement comprises in the following steps :

- (i) Subjecting a liquid melt of urea and ammonium nitrate to reaction at temperatures of 180-200°C in presence of a known silicic acid containing catalyst and maintaining a catalyst melt ratio between 1 : 1 to 1 : 5 by weight,
- (ii) Subjecting the reaction mass of step (i) enriched with guanidine nitrate to quenching in water to temperatures not below 70°C to obtain a turbid liquid,
- (iii) Filtering the turbid liquid if required and subjecting the filtrate to cooling to temperatures not less than 5°C to crystallize guanidine nitrate,
- (iv) Separating the crystals preferably by centrifuging from the liquid which crystals are subjected to washing to saturated guanidine nitrate solution and thereafter subjected to drying, the gaseous stream obtained from the reaction of urea and ammonium nitrate containing substantial amount of ammonia being absorbed in nitric acid to produce ammonium nitrate solution which is subjected to concentration to 50-60% and then recycled to the process as a reactant.

Compl. specn. 17 pages.

Drg. 1 sheet.

CLASS : 32-F₂ (b)

157294

Int. Cl. : C 07 c 63/00.

AN IMPROVED PROCESS FOR OXIDIZING AROMATIC COMPOUNDS CONTAINING REACTIVE CARBON-HYDROGEN BONDS.

Applicant : ROTGERSWERKE AKTIEGESELLSCHAFT, MAINZER LANDSTRASSE 217, D 6000 FRANKFURT MAIN 1/GERMANY.

Inventors : 1. DR. ULRICH KNIPS, 2. BERTRAM BOHMFR, 3. ROLAND HERZBERG.

Application No. 451/Cal/82 filed April 22, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

15 Claims

An improved process for oxidizing aromatic compounds containing reactive carbon-hydrogen bonds with oxygen in carboxylic acid solution in the presence of a catalyst consisting essentially of a cobalt compound as herein described characterized in that after each reaction cycle the catalyst is reactivated by treatment with a strong oxidizing agent as herein described and the water formed during the reaction is removed by distillation.

Compl. specn. 14 pages.

Drg. Nil.

CLASS : 145-D

157295

Int. Cl. : D.21 g 9/00.

AIR KNIFE COATER FOR COATING THE SURFACE OF A TRAVELLING WEB.

Applicant : BELOIT CORPORATION, OF P.O. BOX 350, BELOIT, WISCONSIN 53511, U.S.A.

Inventor : 1. RICHARD ELDON JOHNSON.

Application No. 509/Cal/82 filed May 6, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

10 Claims

An air knife coater for coating the surface of a travelling web, characterized in comprising in combination :

a web supporting carrier over which a travelling web is trained to be supported through a coating zone;
means for applying coating to the web;

an air knife for treating the coating on the web having first and second lip defining an air slot therebetween directed at the web after a layer of coating has been applied by said coating means;

a pivotal support for the first lip mounting the lip for movement between a first position when a precise slot is defined with the other lip and a second position is pivoted away from the second lip for cleaning off the distal edge of the first lip and for access to the slot between the lips.

Compl. specn. 11 pages.

Drg. 1 sheet.

CLASS 27-I

157296

Int. Cl. : E 06 c 1/04.

LOW TORSION MOUNTING CONSTRUCTION FOR MOUNTING A PLURALITY OF SEGMENTS OF A SEGMENTED APPARATUS TO A STRUCTURE.

Applicant : UNITED TECHNOLOGIES CORPORATION, AT 1 FINANCIAL PLAZA HARTFORD, CONNECTICUT 06101, UNITED STATES OF AMERICA.

Inventor : 1. PEDER WINFIELD SCOTT.

Application No. 522/Cal/82 filed May 10, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

8 Claims

A low torsion mounting construction for mounting a plurality of segments of a segmented apparatus to a structure, said construction being characterized by :

(a) a plurality of spaced support members;

(b) first mounting means disposed on said support members proximally to the shear centers thereof, a first end of each of said segments being connected to said first mounting means for both horizontal and vertical retention of first said segment end by a corresponding one of said support members, vertical loading of said corresponding support member due to the weight of said segment being applied to said corresponding support member through the shear center thereof; and

(c) second mounting means each disposed on one of said support members adjacent a second end of said segments, said second mounting means being in horizontal alignment with the shear center of said adjacent support member and connected to said second segment end for horizontal retention only of said second segment end by said adjacent support member, horizontal loading of said adjacent support member due to the weight of said segment being applied to said adjacent support member through the shear center thereof.

Compl. specn. 11 pages.

Drg. 2 sheets.

CLASS : 47-E

157297

Int. Cl. : C 10 b 7/00.

A COKE OVEN PLANT FOR PRODUCING COKE.

Applicant : KRUPP-KOPPERS GMBH, OF MOLTKE-STRASSE 29, 4300 ESSEN 1, WEST GERMANY.

Inventor : 1. VLADAN PETROVIC, 2. KARL SCHMID, 3. HENNER SCHMIDT-THAUB.

Application No. 524/Cal/82 filed May 10, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

4 Claims

A coke oven plant for producing coke in which the coke oven is periodically charged with preheated coal and the coke produced is subjected to a dry cooling process by means of a gaseous coolant and wherein the heat which is removed from the dry coke-cooling process is utilised, directly or indirectly, for preheating the coal, characterized in that for preheating of the coal there is employed a removing-bed drier, which processes heat-exchange tubes (43), which exhibit an extended surface on the coal side, this extended surface being produced by suitable shaping, for example by fins or ribs, these tubes being accommodated in a casing (70), which exhibits a conical taper towards the coal charging-port (79), as well as off-take nozzles (71-77) for withdrawing the exhaust vapours which contain waste gas, these nozzles being located on the side opposite the steam and/or hot gas inlet at various levels, the said heat-exchange tubes of the drier are heated by hot gas or by waste-heat steam from the dry coke-cooling process, the exhaust vapours generated in the moving-bed drier containing waste gas being withdrawn from the drier at various levels which, if desired is re-used in a manner as herein described.

Compl. specn. 19 pages.

Drg. 3 sheets.

CLASS : 130-I

157298

Int. Cl. : C 22 b 19/30.

AN IMPROVED PROCESS FOR SOLUTION CONTROL IN AN ELECTROLYTIC ZINC PLANT CIRCUIT.

Applicant : ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED, OF 390 LONSDALE STREET, MELBOURNE, IN THE STATE OF VICTORIA, COMMONWEALTH OF AUSTRALIA.

Inventors : 1. OLIVER MICHAEL GRIFFITHS NEW MAN, 2. DAVID JOHN PALMER, 3. ROBERT VIVIAN PAMMENTER.

Application No. 594/Cal/82 filed May 24, 1982.

Convention dated 2nd June, 1981 and 10th June, 1981 (PE 9166 and PE 9234) Australia.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

13 Claims

In a process for recovering zinc from an electrolytic zinc plant circuit by controlling the water balance and the concentration of impurity (I) in the electrolytic zinc plant circuit in which zinc is precipitated from an aqueous solution (A) containing zinc sulphate using a compound (R) as herein described containing zinc oxide as the precipitant in a selective zinc precipitation (SZP) process plant, thereby producing precipitated solids (S) containing basic zinc sulphate and a zinc depleted solution (Y), the solids (S) being returned to the said circuit, and where the impurity I comprises at least one member of the group magnesium, manganese, chloride, sodium, and potassium, the improvement which comprises reducing the volume of zinc-depleted solution Y returned over an interval of one day to the said circuit in association with the solids S by adding the compound R having an average particle size in the range of 5 to 150 μ m.

Compl. specn. 105 pages.

Drg. 2 sheets.

CLASS : 127-G

157299

Int. Cl. : H 60 k 17/00.

MOTOR VEHICLE DRIVE TRANSMISSION.

Applicant : HARRY FERGUSON LIMITED, OF 24, LITTLE CHESTER STREET, LONDON, SW1X 7AP, GREAT BRITAIN.

Inventors : 1. ANTHONY JOHN SHELDON, 2. ANTHONY PETER ROYLANCE ROLT.

Application No. 746/Cal/82 filed June 25, 1982.

Convention dated 26th June, 1981 and 12th February, 1982 (8119769 and 8204198) Great Britain.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

5 Claims

A motor vehicle drive transmission having a first transmission path (31, 32, 33, 34) in which all drive-transmitting members are adapted to transmit torque positively between a motor (29) and a first set of road wheels (30) with provision for inter-wheel differential action, and a second transmission path (31, 35, 36, 11, 10, 14) in which a drive transmitting member (14) is capable of slipping in transmitting torque between said motor (29) and a second set of road wheels (12A, 13A) with provision for inter-wheel differential action; CHARACTERIZED IN THAT the mentioned slipping capability and also the provision for differential action between the road wheels (12A, 13A) of the said second set are simultaneously attained solely by means of viscous shear coupling elements (14) incorporated in a final drive assembly having the said second set of road wheels.

Compl. specn. 11 pages.

Drg. 2 sheets.

CLASS : 32-A₁

157300

Int. Cl. : C 09 b 31/18.

PROCESS FOR THE PREPARATION OF WATER-SOLUBLE DISAZO COMPOUNDS AND NEW BIS-(AMINOPHENOXY)-ETHANE COMPOUNDS HAVING FIBER-REACTIVE GROUPS AS THE TETRAZO COMPOUNDS.

Applicant : HOECHST AKTIENGESellschaft, OF D-6230 FRANKFURT AM MAIN 80, FEDERAL REPUBLIC OF GERMANY.

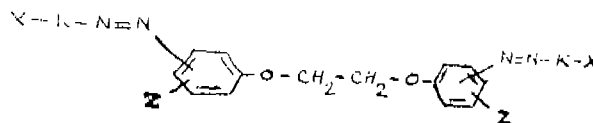
Inventors : 1. HERMANN FUCHS, 2. KLAUS FILZINGER.

Application No. 827/Cal/82 filed July 19, 1982.

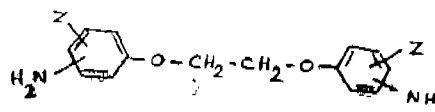
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

20 Claims

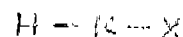
A process for preparing a water-soluble disazo compound of the formula (1) of the accompanying drawings



in which the formulae moieties occurring twice, namely K, X and Z, in each case have a meaning identical to one another and the groups Z are bonded to the two benzene nuclei in each case in the ortho- or in each case in the para-position relative to the ethylene-dioxy substituent, and the azo groups and the groups Z in the benzene nuclei are in each case bonded in the meta-position relative to one another and K is the radical of a coupling component containing a carboxy, sulfato and/or sulfo group, X denotes a hydrogen atom or a fiber-reactive group and Z is a group of the formula $-SO_2-CH=CH_2$ or $-SO_2-CH_2-CH_2-Y$ in which Y denotes an inorganic or organic radical which can be eliminated in an aqueous medium under alkaline or acidic conditions and X can also have the meanings of Z which comprises coupling a tetrazonium salt of a diamine of the formula (4)



in which Z is defined as above or is a β -hydroxyethyl-sulfonyl group, and both Z's have the same meanings and in which the groups Z are bonded to the two benzene nuclei in each case in the ortho- or in each case in the para-position relative to the ethylenedioxy substituent, and the amino groups and the groups Z in the benzene nuclei are in each case bonded in the meta-position relative to one another, with the equivalent amount of a coupling component of the formula (5)



in which K and X have the meanings mentioned above or X is the β -hydroxyethylsulfonyl group, and converting β -hydroxy-ethylsulfonyl groups, if they are present, into the β -sulfoethylsulfonyl groups of the general formula $-SO_2-CH_2-CH_2-OSO_3M$, in which M is a hydrogen atom or an alkali metal or an equivalent of an alkaline earth metal, by means of a sulfating agent.

Compl. specn. 62 pages.

Drg. 7 sheets.

CLASS : 40-II

157301

Int. Cl. : F 25 j 3/08.

AN IMPROVED SOLVENT EXTRACTION AND CRYOGENIC PROCESS FOR REMOVING ACIDIC GASES FROM NATURAL OR SYNTHESIZED GASES.

Applicant : SNAMPROGETTI S.p.A. OF CORSO VENEZIA 16, MILAN, ITALY.

Inventors : 1. LUIGI GAZZI, 2. GIANCARLO COTONE, 3. GIANFRANCO SOLDATI, 4. ALESSANDRO GINNASI, 5. ALESSANDRO VETERE, 6. CARLO RESCALI.

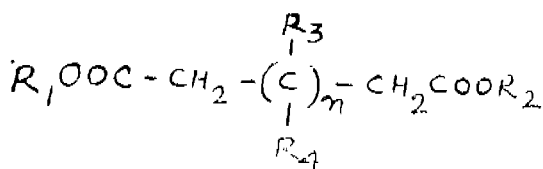
Application No. 844/Cal/82 filed July 21, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

24 Claims

An improved solvent extraction and cryogenic process for removing acidic gases from natural or synthesized gases characterized in that it applies one or more solvents selected from among low molecular weight esters and ethers of the following classes :

- esters of alcohols of the general formula R_1COOR_2 , wherein R_1 and R_2 are alkyls having from 1 to 4 carbon atoms, equal to or different from one another;
- esters of glycols of the general formula of Fig. 2(a),

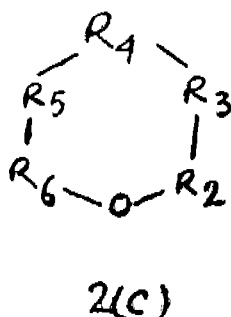


wherein R_1 and R_2 are alkyls having from 1 to 3 carbon atoms, equal to or different from one another, R_3 and R_4 , equal to or different from one another, are either alkyls having from 1 to 3 carbon atoms, or hydrogen atoms, n is an integer which can take the values of 0 or 1;

— cyclic esters (lactones) of the formulae of Fig. 2(b),



wherein R_1 , R_3 , R_4 , R_5 , equal to or different from each other, are alkyls in which the hydrogen is optionally substituted by alkyls or methoxy group-open-chain, or cyclic ethers such as of Fig. 2(c),



wherein R_2 , R_3 , R_5 , equal to or different from each other, are alkyls in which the hydrogen is optionally substituted by alkyls or methoxy groups, R_6 is an oxygen atom or an alkylene in which the hydrogen can optionally be substituted by alkyls or methoxy groups, R_4 is the same as R_5 or is absent in the case of a 5-membered ring;

- diethers of the general formula $R_1-O-CH_2-(R_3)_n-CH_2-O-R_2$ wherein R_1 is an alkyl having from 1 to 4 carbon atoms, R_2 is an alkyl of from 1 to 4 carbon atoms or a hydrogen atom, R_3 is either an alkylene or a (CH_2-O-CH_2) group, n is an integer which can be either 0 or 1;
- monoethers of the general formula R_1-O-R_2 , wherein R_1 and R_2 , equal to or different from one another, are alkyls having from 1 to 4 carbon atoms;

esters-ethers, compound containing both the etheric and the etheric functions simultaneously, of the formula $(R_1O)_n-R_1-COOR_2-OR_3$, wherein R_3 and R_4 , equal to or different from one another, are alkyls having from 1 to 4 carbon atoms, R_2 is an alkylene having from 1 to 4 carbon atoms, R_1 is the same as R_2 or the same as R_4 , n is an integer which can be either 0 or 1; and comprises the steps of :

- (a) Feeding the natural gas or the synthesis gas to a first absorption column containing the solvent from the above group selected to absorb H_2S ;

- (b) Feeding the substantially H_2S -stripped gas to a low-temperature distillation column having the task of reducing the carbon dioxide contents, from the bottom of said column liquified carbon-dioxide being substantially drawn;

- (c) Feeding the gas emerging from the low-temperature distillation column to a second absorption column to a second absorption column to reduce the contents of carbon dioxide to the desired value;

- (d) Regenerating the solvent(s) used for the absorption of H_2S and CO_2 initially by one or more expansion stages wherefrom the useful components absorbed together in the stages (a) and (c) are recovered to be recycled to the first absorption column, then by another or a number of additional expansion stages wherefrom CO_2 and H_2S are recovered and subsequently by means of a second distillation column from the head of which H_2S and CO_2 emerge, and

- (e) Recycling the regenerated solvent(s) first to the absorption column of (c) and then subsequently in series to the first absorption column of stage (a).

Compl. specn. 21 pages.

Drg. 2 sheets.

CLASS : 122

157302

Int. Cl. : B 03 c 3/00.

CONTROL DEVICE FOR AN ELECTROSTATIC DUST SEPARATOR.

Applicant : FLAKT AB, OF SICKLA ALLE 13, BOX 81 001, 104 81 STOCKHOLM, SWEDEN.

Inventors : 1. ALF GOSTA GUSTFSSON. 2. SIGVARD MATTS.

Application No 874/Cal/82 filed July 28, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

11 Claims

A control device for an electrostatic dust separator having electrodes an a.c. power supply with rectifiers to generate intermittent power impulses, and means to convert said power impulses to direct current which is supplied to said electrodes, said control device comprising a first means sensing the level of direct current in said separator, a second means sensing the d.c. voltage in the separator, a third means sensing the zero point in the a.c. voltage of said a.c. power supply, and a data processing unit controlling said rectifiers, said data processing unit being coupled to said first, second and third sensing means so that in response to actual direct current and actual d.c. voltage in the separator and time-related to said zero points in a.c. voltage, said processor both calculates a specific time duration for the power impulses through said rectifiers and also generates switching-in and/or switching-out pulses and feeds them to the rectifiers.

Compl. specn. 24 pages.

Drg. 5 sheets.

CLASS : 61-G & I: 98-G

157303

Int. Cl. : F 28 c 11/00, 19/00.

PROCESS AND APPARATUS FOR PRODUCING DRIED AND HOT PARTICULATE MATERIAL.

Applicant : ASAHI GLASS COMPANY, LTD., OF 1-2, MARUNOUCHI 1-CHOME, CHIYODA-KU, TOKYO JAPAN.

Inventor : 1. SHIRO TAKAHASHI.

Application No. 954/Cal/82 filed August 16, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

4 Claims

An apparatus for drying or heating a particulate material by means of heat transfer medium which is brought into direct contact with the particulate material comprising a rotary cylindrical drum of substantial length and cross sectional area, a conveyor for introducing the heat transfer medium preheated at a predetermined high temperature into the drum from one end of the drum, a conveyor for introducing the particulate material into the drum from the other end of the drum, a conduit for discharging the heat transfer medium after having been effected heat transfer in the drum at the end of the drum opposite to the heat transfer medium charging end of the drum, and a conduit for discharging the particulate material after having been effected heat transfer in the drum at the end of the drum opposite to the particulate material charging end of the drum, characterized in that a helical blade is attached to the interior of the drum along the circumference wall thereof extending substantially the entire length of the drum so that the heat transfer medium may flow in one direction through the drum moving along a helical path of the blade and coming in direct and immediate physical contact with the particulate material flowing in the opposite direction through the drum as the drum rotates.

Compl. specn. 24 pages.

Drg. 6 sheets.

CLASS : 56-B & 40-A;

157304

Int. Cl. : C 10 g 13/00.

STEAM CRACKING PROCESS OF HEAVY HYDROCARBONS.

Applicant : TOYO ENGINEERING CORPORATION, OF NO. 2- KASUMIGASEKI 3-CHOME, CHIYODA-KU, JAPAN.

Inventors : 1. IKUYOSHI KOCHI, 2. ITSUO MORITA, 3. TADAYOSHI TOMITA, 4. TAKAYUKI SAKAMOTO, 5. TOSHIO TAMAGUCHI.

Application No. 957/Cal/82 filed August 17, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

2 Claims

A process for steam cracking of heavy hydrocarbons to form a hydrogen-containing gas consisting essentially of hydrogen, carbon oxides and lower hydro-carbon which comprises the steps of flowing a heavy hydrocarbon feedstock together with steam through one or more catalyst-free tubular first reactors in a first steam cracking zone having a large heat flux in the range of 10,000 to 70,000 Kcal/m²hr on the inner wall of said tubular reactor at a flow rate of 4 to 100 m/sec and a residence time within said first tubular reactor of 0.05 to 3 seconds, so as to rapidly heat said heavy hydrocarbon feedstock and steam to a temperature in the range of 800° to 1,000°C; and then flowing the gaseous mixture discharged from said first steam cracking zone through one or more catalyst-free tubular second reactors in a second steam cracking zone having a small heat flux in the range of 1,500 to 10,000 Kcal/m²hr, at a flow rate of 4 to 100m/sec and a residence time within said second tubular reactor of 0.1 to 6 seconds so as to increase the temperature of said gaseous mixture and stream to a temperature in the range of 850° to 1,000°C, thereby subjecting the heavy hydrocarbons to steam cracking and producing said hydrogen-containing gas.

Compl. specn. 24 pages.

Drg. 1 sheet.

CLASS : 50-F & 160-C

157305

Int. Cl. : B 60 p 3/20; F 25 d 23/00.

TRANSPORT REFRIGERATION UNIT WITH REMOVABLE POWER PACK FRAME.

Applicant : THERMO KING CORPORATION, OF 314 WEST 90TH STREET, MINNEAPOLIS, MINNESOTA-55420, UNITED STATES OF AMERICA.

Inventors : 1. JERRY ALLIN BROWNFIELD, 2. RICHARD JOHN SANDBERG, 3. THOMAS JOHN NIEMI, 4. LELAND LOUIS HOWLAND.

Application No. 990/Cal/82 filed August 26, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

7 Claims

A transport refrigeration unit comprising an exterior section adapted to be mounted on the front face of a transport trailer or the like, an interior section including a refrigerant evaporator adapted to project rearwardly from the top, rear part of said exterior section into said trailer, and including a refrigerant compressor and at least an internal combustion engine for driving said compressor, characterized in that (a) said exterior section is of generally rectangular box shape and of significantly greater height than width, and includes a refrigerant condenser generally vertically disposed at the upper front face of said exterior section; (b) said exterior section includes means defining a front opening having a height from closely adjacent the bottom of said exterior section to closely adjacent the lower edge of said condenser, and a width for substantially the width of said exterior section; and (c) there is provided a power pack frame means which is disposed in the lower portion of said exterior section for mounting, in separated relation and independently, at least both said engine and said compressor at vertically displaced levels, said engine being located with its base at a substantially lower level than the level of the base of said compressor, and said engine and compressor being so arranged that their output and input ends, respectively, project in directions toward each other and with the compressor input end overlying said engine output end, each of said ends comprising first pulley means connected by first belt means lying in a vertical plane transverse to the width of said exterior section for driving said compressor input means from said engine when it operates; and said power pack frame means comprising an engine mount section including front and rear bottom horizontal rails to which said engine is secured, and front and rear vertical gusset members of generally rhomboid shape extending from adjacent one side of said exterior section for a major part of the length of said frame means and having said engine mounted in nested relation therebetween, said frame means comprising upper rail means extending from said gusset members to adjacent the other side of said section, said upper rail means supporting compressor mounting means.

Compl. specn. 17 pages.

Drg. 5 sheets.

CLASS : 160-C

157306

Int. Cl. : B 64 d 11/06.

AN ENERGY-ABSORBING SEAT ARRANGEMENT.

Applicant : ENGINEERING PATENTS & EQUIPMENT LIMITED, OF JERSEY, CHANNEL ISLANDS OF OAK WALK, ST. PETER, JERSEY, CHANNEL ISLANDS

Inventor : JOHN STEPHEN MARTIN.

Application No. 1287/Cal/82 filed November 2, 1982.

Convention dated 2nd November, 1981 (8133001) United Kingdom.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

4 Claims

An energy-absorbing seat arrangement including a first structure, including a seat pan, and a second structure adapted for fixing to an aircraft, one of said structures comprising two parallel generally vertical pillars, and the other of said structures comprising a frame providing, for each said pillar, a respective collar embracing the pillar slidably, and a respective portion, also embracing the pillar slidably, and spaced along the pillar from said collar, and wherein said first structure is connected with said second structure by a plurality of elongate energy absorbing devices, each comprising a plastically deformable metal member and a deforming member, arranged to prevent sliding movement of said frame longitudinally relative to said pillars in at least one predetermined direction except by longitudinal drawing of the plastically deformable metal members relative to the deforming members and consequent energy-absorbing deformation of the deformable members by the deforming members, and in that there are a plurality of said energy absorbing devices for each said pillar, arranged

symmetrically about the longitudinal axis of the pillar, and parallel therewith, one of said members of each energy absorbing device being secured to a cap carried at the end of the respective pillar nearer the respective said collar portion, and the other of said members being secured to the respective collar portion, whereby in the event of the force acting between said pillars and said frame in said predetermined direction parallel with said pillars exceeding a predetermined value, said frame will move slidably along said pillars so as to draw the collar portions away from the respective caps and draw the deformable members relative to the deforming members.

Compl. specn. 11 pages.

Drg. 3 sheets

CLASS : 6-B₁

157307

Int. Cl. : B 01 d 46/24.

AN IMPROVED INTERNAL COLLECTION TYPE AIR FILTER BAG FOR FILTERING PARTICULATE MATERIAL.

Applicant : MRS. FRANCIS HENDRICK JOHNSON OF 1235 WEST HENDERSON STREET, SALISBURY, NORTH CAROLINA, U. S. A.

Inventor : ALLEN STARLING JOHNSON, JR.

Application No. 1271/Cal/82 filed October 23, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

6 Claims

An improved internal collection type filter bag for filtering particulate material (20) wherein air to be cleaned is directed through an open entrance and (21) of the filter bag into the filter bag and flows outwardly through the material forming the filter bag, characterized in that means (31, or 31', 31'') extends within the filter bag (20) for separating the air to be cleaned flowing into the filter bag into a plurality of portions and for essentially confining the separated portions of air from each other by providing a barrier therebetween and for directing the respective separated and confined portions of air into engagement with and outwardly through respective different length-wise portions (A, B, C) of the filter bag.

Compl. specn. 18 pages.

Drg. 3 sheets.

OPPOSITION PROCEEDINGS

The application for Patent No. 152584 (46/Mas/81) by Srinivasagam Pillai Ramaswamy, in respect of which an opposition was entered by Messrs Sri Lanka Tea Board and Messrs Colombo Commercial Co. (Fnggs.) Ltd., as notified in the Gazette of India, Part-III, Sec. 2 dated the 15th September, 1984 has been treated as withdrawn.

PATENTS SEALED

141577 145526 145538 145627 145637 145649 145707 152804
154265 154488 154638 154697 154975 155126 155129 155130
155132 155133 155135 155136 155137 155141 155143 155146
155147 155149 155151 155152 155153 155154 155155 155156
155158 155161 155174.

STATEMENT REGARDING LICENCE AGREEMENT OF PATENTS REGISTERED UNDER SECTION 68 & 69 FOR THE PERIOD OF OCTOBER 1985 TO DECEMBER, 1985.

(FROM INDIAN TO INDIAN)

Patent Nos.	Patentee	Licence Granted to	Licence granted on	Entry made under Sec.	Entry made on
149178	Sri Rajeshwar Dayal, Bombay.	Devi Protonuts & Co., Madras.	8th August, 1985	68	26th December, 1985
150457	Do.	Do.	Do.	68	Do.

STATEMENT REGARDING ASSIGNMENTS OF PATENTS REGISTERED UNDER SECTION 68 & 69 FOR THE PERIOD OF OCTOBER 1985 TO DECEMBER, 1985

(FROM INDIAN TO INDIAN)

Patent Nos.	Patentee	Assigned to	Date of assignment	Entry made under Sec.	Entry made on
147002	Sam Sohrabji Motafram West Bengal	Elpro International Ltd. of Chinchwood Gaon, Pune-33, Maharashtra.	1st Dec., 1985	68	31st October, 1985
146942	Do.	Do.	Do.	68	Do.
146943	Do.	Do.	Do.	68	Do.
146944	Do.	Do.	Do.	68	Do.
146252	Do.	Do.	Do.	68	Do.
142800	Jal Ardeshik Meher Homji, Calcutta.	Do.	Do.	68	Do.
151661	Council of Scientific Industrial Research, New Delhi.	National Research Development Corp., of India, New Delhi	4th Sept. 1985	68	8th Nov. 1985
147991	Do.	Do.	26th Jul. 1985	68	Do.
143016	Do.	Do.	4th Sept. 1985	68	Do.
144141	Do.	Do.	26th Jul. 1985	68	28th Nov. 1985
152860	Chief Controller Research & Development, Ministry of Defence, Govt. of India, New Delhi.	Do.	1st Oct. 1985	68	31st December, 1985

COMMERCIAL WORKING OF PATENTED INVENTIONS

MECHANICAL AND GENERAL
ENGINEERING — LIST XI

The following Patents in the field of Mechanical & General Engineering Industry are not being commercially worked in India as admitted by the Patentees in the statements filed by them under section 146 (2) of Patents Act, 1970, in respect of calendar year 1983, generally on account of want of requests for licences to work the Patented inventions. Persons who are interested to work the said Patents commercially may contact the Patentees for the grant of a licence for the purpose.

Sl. No.	Patent No.	Date of Patent	Name & Address of Patentees	Title of the invention
1	2	3	4	5
1.	145656	2-9-1976	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, Rafi Marg, New Delhi-1, India.	A vacuum pump for obtaining oil free vacuum for air sampling in air pollution studies.
2.	147014	4-8-1978	AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION, P. O. Polytechnic, Ahmedabad-15, Gujarat, India.	An instrument to measure and indicate the speed of shuttle in and for looms.
3.	147035	26-9-1977	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, Rafi Marg, New Delhi-1, India.	An improved soil mixing/filling implement.
4.	147050	13-4-1976	SIEMENS AKTIENGESELLSCHAFT, of Berlin & Munich, West Germany.	Improvements in or relating to housing assemblies for electrical apparatus.
5.	147113	26-10-1976	SOCIETE 'D' ETUDES DE MACHINES THERMIQUES, S. E. M. T., of 2 Quai De Saine 93202 Saint Denies, France.	Improvements in or relating to fuel injection pumps for internal combustion engines.
6.	147116	1-3-1978	HOECHST AKTIENGESELLSCHAFT, of 6230 Frankfurt/Main 80 Federal Republic of Germany.	Process and device for the manufacture of a tube bend of thermoplastic material.
7.	147122	19-9-1977	KAJ-RAGNAR LOQUIST ET AL Ragnabagsvagen 40, S 77300, Fagersta, Sweden.	An apparatus for utilizing kinetic energy.
8.	147124	11-3-1977	WILLIAM LISTER, of 36 Rabaul Street, Moorooka Queens Land, 4105 Australia.	A pneumatic percussion hammer.
9.	147132	22-6-1978	KIRLOSKAR OIL ENGINES LTD., Laxmanrao Kirloskar Road, Khadki, Pune-411003.	A monoblock centrifugal pump set.
10.	147146	29-10-1976	SOCIETE DE DIFFUSION ET DE RECHERCHES, TECHNIQUES, ET FINANCIERES S. A. of Avenue Du Chateau De, La cour 4 CH-3960 SIERRE.	Manufacturing process for self-supporting elements particularly roofing panels and panels and panels constituent part of buildings and an apparatus for carrying out the process.
11.	147161	10-6-1976	SOCIETE D'ETUDES DE MACHINES THERMIQUES S. E. M. T. 2 Quai de Seine 93202, Saint Denis France.	Device for measuring and following the degree of wear of a first element having predetermined magnetic properties in sliding contact with a second element.
12.	147175	6-9-1976	SOCIETE NATIONALE DES POU-DRES ET EXPLOSIFS, of 12 Quai Henri IV, Cedex 04, 75181, Paris, France.	Improvements in or relating to a screw extruder having a screw casing connected to a bed.
13.	147178	4-4-1977	KELIN-SCHANZLIN-BECKER AG., 6710, Frankenthal (Pfalz), Postfach 224, Johann-Klein Strasse 9, F.R.G.	Blade for rotor or rotary pumps.
14.	147189	7-3-1977	ALUMINIUM PECHINEY, 28, rue de Bonnel, 69003, Lyon, France.	An apparatus for producing aluminiums by fused electrolysis of aluminium cryolite.
15.	147193	21-3-1977	THOMAS H. SHEPHERD OF 12 North Greenwood, avenue, Hope well New Jersey 08525, U.S.A.	A mold constructed of thermoplastic material & a process for producing contact lenses.

1	2	3	4	6
16.	147197	31-10-1977	REXNORD INC. 3500, Wisconsin Centre, 777, East, Wisconsin Avenues, Milwaukee, Wisconsin, 53202 U.S.A.	Striking plate for disintegrating mill.
17.	147202	19-1-1977	MOBIL TYCO SOLAR ENERGY CORPORATION, 16 Hickory, Drive, Waltham, Massachusetts, U.S.A.	Solar cells and method of producing the same.
18.	147214	19-11-1975	PERSONAL PRODUCTS COMPANY of Milltown, New Jersey, U.S.A.	A catamenial device.
19.	147265	4-3-1977	MRS. SHANTABAI SHRIDHAR SATHI, 418, Narayan Peth, Pune-411030, Maharashtra, India.	Improved water heater.
20.	147272	20-3-1978	QUIGLEY COMPANY INC. of 235 East 42nd Street, New York, State of New York, U.S.A.	Sprayer for repairing refractory lining.
21.	147277	17-4-1978	WERKZEUGMASCHINEN PABRIK OERLIKON-BUEHRLE, A. G. of Birchstrasse 155, CH, 8050 Zurich, Switzerland.	Automatic load-dependant air brake.
22.	147282	12-8-1977	F. L. SMIDT & CO., A/S, of 77 Vigerslev Alle, DK-2500, Valby, Copenhagen, Denmark.	Mechanical adjustable roller support for drums.
23.	147309	4-3-1978	KIRLOSKAR OIL ENGINES LTD., Laxmanrao, Kirloskar Road, Khadki, Pune-411003.	An improved internal combustion engine.
24.	147317	22-12-1977	SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B. V. Carel Van Bylandtlaan 30, The Hague, The Netherlands.	Apparatus for the classification of finely divided fuels.
25.	147321	27-2-1978	UNION CARBIDE CORPORATION, of 270 Park Avenue, New York, State of New York-10017, U.S.A.	An improved liquid-gas contacting tray.
26.	147324	3-11-1977	PECHINEY UGINE KUHLMANN, of 23, Rue Balaze 75008, Paris, France.	A process for purifying the exhaust gases given off by diesel type internal combustion engines.
27.	147343	27-6-1977	WILLIAM LISTER, of 436 Rabaul Street, Moorooka, Queensland, 4105, Austria.	Rock-drilling bit for percussive hammers.
28.	147381	27-6-1977	KLEIN-SCHANZLIN-BECKER AG. Postfach 225, Johann Klein-Strasse, 9, D-6710, Frankenthal (Pfalz), F. R. G.	A tubular chamber feeder for hydraulically conveying solids.
29.	147404	6-10-1975	THIAGARD TECHNOLOGY COMPANY, of 2712 Kelvin Avenue, Irvine, State of California, U.S.A.	A process for carrying out a chemical reaction of an elevated temperature and reactor for carrying out the same.
30.	147431	30-4-1977	MOBIL TYCO SOLAR ENERGY CORPORATION, 16, Hickory Drive, Waltham, Massachusetts, U.S.A.	Apparatus for crystal growth.
31.	147441	3-8-1976	G. D. Società Per Azioni, of via Pomponia, 10, Bologna, Italy.	An improved rotory head device for supplying cigarettes to the feeding hopper of a cigarette packing machine.
32.	147451	7-6-1976	DR. C. OTTO & G.m.b.H. Bochum, West Germany.	Regeneratively operated underjet coke oven.
33.	147462	1-2-1977	USS ENGINEERS AND CONSULTANTS—INC. 600, Grant Street, Pittsburgh, State of Pennsylvania, U.S.A.	Method of repairing an erosion cavity in ingot mold stools & the bottoms of closed bottom metal molds.
34.	147467	5-10-1976	MACHINENFABRIK REINHAUSEN GEBRUDER SCHEUBECK, G.m.b.H. of 8 Falkensteinstrasse, 84 Regensburg, F.R.G.	On-load tap changer.
35.	147475	16-5-1977	UNION CARBIDE CORPORATION, of 270 Park Avenue New York, State of New York 10017, U.S.A.	A foam applicator head for application of foam to a substrate.

1	2	3	4	5
36.	147487	29-6-1978	INDIAN EXPLOSIVES LIMITED, 34, Chowringhee, Calcutta 700071, West Bengal, India.	A self-sealing pack and a method of making the same.
37.	147491	6-8-1977	GIRLING LIMITED, of Kings Road, Tyseley, Birmingham 11, England.	Improvements in self-energising Disc brakes.
38.	147493	1-11-1977	COMPAGNIE FRANCAISE D'ETUDES ET DE CONSTRUCTION "TECHNIP" of 232 Avenue Napoleon, Bonaparte, 92500, Rusil Malmaison, France.	Device for winding tubes around vertical & stationary cores.
39.	147518	19-6-1978	BIG GLASSGROUP, Rue, Caumartin, 43, Paris, France.	Method of manufacturing mirrors and mirrors so obtained.
40.	147528	13-2-1978	PAUL REIM, 5, Rathausgasse, 7100 Heibronn, F.R.G.	Framing means for framing a picture or other object.
41.	147542	4-1-1978	ENVIROTECH CORPORATION, salt Lake City, Utah, U.S.A.	Thickening device and method.
42.	147568	1-8-1977	KRAFTWERK UNION AG. 4330 mulheim (Ruhr) Wiesenstr. 35, F.R.G.	Turbine casing assembly.
43.	147569	22-3-1977	S. A. DES ANCIENS ETABLISSEMENTS PAUL WURTH, 32 rue d'Alsace, Luxembourg, Grand Duchy of Luxembourg.	Improvements in and relating to bleed valves.
44.	147574	7-11-1977	USS ENGINEERS AND CONSULTANTS, INC. of 600 Grant Street, Pittsburgh, State of Pennsylvania, U.S.A.	Sliding gate valve.
45.	147583	10-2-1976	CLAUDO ALDECOA LECANDA, Vizcaya 5, Victoria, Spain.	Parachute catch safety and opening mechanism for the braking of aerobombs.
46.	147587	11-5-1977	TESA S. A. of Rue Bugnon 38, 1020 Renens, Switzerland.	Adjustable fork gauge.
47.	147594	6-12-1977	CHAUX ET DOLOMIES DOBOULONNAIS ETC. 26, Rue Des Cordeliers 75013 Paris, France.	A process for preparing light weight concrete material.
48.	147610	14-6-1977	UNITED TECHNOLOGIES OF 1, Financial Plaza, Hort Ford, Connecticut 06101 U.S.A.	A gas turbine.
49.	147611	15-9-1977	SCHOTTEL-WERFT JOSEPH BECKER, GMBH & CO KG. 5401 Spy/Rhein, Republic of Germany.	Power driven vessel.
50.	147631	23-9-1977	DEMAG AKTIENGESSELLSCHAFT, of Wolfgang-Reuter-Platz of D-4100 Duisburg, F.R.G.	Device for the continuous removal of dumps of bulk material.
51.	147647	2-11-1977	CANADIAN INGERSOLL-RAND CO. LTD., 620, Cathcart Street, H3B, 1M2, Montreal, Quebec, Canada.	Screening apparatus hydrofoil.
52.	147650	15-2-1977	ALEXANDER GEORGE COPSON, of 52 High Street, Yaddlethorpe Sountorpe, Lincolnshire, England.	Normally closed gas exhaust valve and diving gas recovery system incorporating the same.
53.	147668	12-1-1977	USS ENGINEERS & CONSULTANTS, INC. of 600 Grant Street, Pittsburg, State of Pennsylvania, U.S.A.	Subsurface pumping installation for handling viscous or sand-laden fluids.
54.	147686	20-8-1975	Do.	Apparatus for locating improperly positioned rolls in a curved roll-rock.
55.	147704	30-6-1978	G. D. SOCIETA PER AZIONI, of Via, Pomponia, 10, Bologna, Italy.	Device for checking that the bands joining filters to cigarettes have been sealed down.
56.	147722	25-2-1978	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, Rafi Marg, New Delhi-1, India.	Improved extrusion device for plastic materials for use in chemical and food industries.

1	2	3	4	5
57.	147744	27-12-1977	AHMEDABAD TEXTILE INDUSTRY'S RESEARCH, P. O. Polytechnic, Ahmedabad-15, Gujarat, India.	An instrument to measure the niploads in textile draw frames.
58.	147745	22-7-1977	Do.	A rapid abrasion testing means for laminates plastics paper and leather.
59.	147753	2-8-1977	KRAFTWERK UNION AG, 433, Mulheim (Ruhr), Wiesenstr. 35, F.R.G.	A shaft seal for a steam turbine with a divided outer housing & a shaft seal cover.
60.	147766	28-6-1978	UOP INC. of Ten UOP Plaza-Algonquin & Mt. Prospect Roads, Des Plaines, Illinois, U.S.A.	Moving bed radial flow solids-fluid contacting apparatus.
61.	147767	12-7-1977	SCHUBERT & SALZER MASCHINENFABRIK AKTIENGESSELLSCHAFT, of Friedrich-Ebertstrasse 84, 8070, Ingolstadt, West Germany.	Apparatus for winding a thread delivered at a constant speed.
62.	147773	28-11-1977	UNITED STATES PIPE & FOUNDRY CO. 3300, First Avenue, North, Birmingham, Alabama, U.S.A.	Pipe joints.
63.	147774	30-6-1977	MASSEY-FERGUSON SERVICES N. V. Antilles Abraham de Veerstraat 7A, Curacao, Netherlands, Antilles.	A stackable filter head unit and a filter assembly.
64.	147782	5-8-1978	INDIAN EXPLOSIVES LIMITED, 34 Chowringhee, Calcutta-700071, West Bengal, India.	A cartridge spacer Assembly.
65.	147788	31-10-1977	UNION CARBIDE CORPORATION, of 270 Park Avenue, New York, State of New York-10017, U.S.A.	A thermomechanical scarfing process and apparatus therefor.
66.	147789	17-11-1977	SOCIETE D'ETUDES DE MACHINES THERMIQUES-S.E.M.T of Quai de Seine, 93202, Saint Denis, France.	A supercharger set for internal combustion engines of reciprocating piston type.
67.	147805	7-10-1977	KNORR BREMSE GmbH H. of 8000 München-9, Miesbacher Str. 80, F.R.G.	Filling-up valve for compressed air, brakes.
68.	147808	29-9-1977	USS ENGINEERS AND CONSULTANTS INC. 600, Grant Street, Pittsburgh, State of Pennsylvania, U.S.A.	A sliding gate valve for a teeming vessel.
69.	147835	9-5-1978	SVEN RUNO VILHELM GEBELIUS Fridhögsgatan 27, 11240-Stockholm Sweden.	S. Device for reducing or interrupting a media flow through a tubular pipe.
70.	147896	19-8-1977	SCHUBERT & SALZER MASCHINENFABRIK, AKTIENGESSELLSCHAFT, Friedrich-Ebert-Strasse 84, 8070 Ingolstadt, West Germany.	Apparatus for separating contaminants from fibrous material in particular from cotton fibrous material.
71.	147910	25-3-1977	G. D. SOCIETA PER AZIONI, Via, Pomponia 10, Bologna, Italy.	Device for adjusting the slope of side flaps in particular of piled-up Card board blanks.
72.	147918	16-3-1978	UNION CARBIDE CORPORATION, 270 Park Avenue, New York, State of New York 10017, U.S.A.	A improved gas-liquid contacting tray.
73.	147945	14-6-1977	KRAFTWERK UNION AKTIENGESSELLSCHAFT, Mulheim (Ruhr) 4330, Wiesenstr, F.R.G.	Auxiliary bearing for determining radial and axial play of turbine shafts.
74.	147991	27-1-1978	COUNCIL OF SCIENTIFIC & INDUSTRIAL Research Rafi Marg, New Delhi-1, India.	A vacuum guard.
75.	148002	21-7-1977	SUCCESSOR TO COLIN WILLIAM Skelton 160, Kilaben BAY, New South Wales, 2283, Australia.	Safety drop brake.

COMMERCIAL WORKING OF PATENTED INVENTION

MECHANICAL ENGINEERING LIST NO. XII

The following Patents in the field of Mechanical and General Engineering Industry are not being commercially worked in India as admitted by the Patentees in the statements filed by them under Section 146(2) of Patents Act, 1970, in respect of calendar year 1983 generally on account of want of requests for licences to work the Patented inventions. Persons who are interested to work the said Patents commercially may contact the Patentees for the grant of a licence for the purpose.

Sr. No.	Patent No.	Date of Patent	Name and Address of Patentees	Title of the invention
1	2	3	4	5
1.	148014	25-1-1978	KENTREDDER LTD., Longueville Street, Saviour, Jersey, British Channel, Islands.	Method and apparatus for treading tyres.
2.	148029	31-1-1978	GIRLING LIMITED, of Kings Road, Tysoley, Birmingham 11, England.	Hydraulic braking systems for vehicles.
3.	148054	9-2-1977	SOCIETE D'ETUDES DE MACHINES THERMIQUES S.E.M.T. 2 Quai de la Seine 93202 Saint, Senis, France.	Improvements in or relating to a device for damping pressure waves in an internal combustion engine fuel injection system.
4.	148058	2-11-1977	CANADIAN INGERSOLL-RAND CO. LTD., 620 Cathcart Street M3B, 1M2, Montreal, Quebec, Canada.	Screening apparatus.
4.	848086	16-3-1978	YOUNGFLEX S.A. of 1 Rue Fries, 1701, Fribourg, Switzerland.	A cushion support structure for incorporation in a seat.
6.	148092	19-9-1978	AUTOMATIVE PRODUCTS LTD., of Techbrook Road, Leamington spa, Warwickshire 3ER, England.	Brake fluid reservoirs.
7.	148098	1-9-1977	RHEINMETALL GMBH. of 4, Dusseldorf, Ullmenstrasse, 125, West Germany.	Cartridge casing for a propellant charge.
8.	148113	28-10-1977	TOMOE TECHNICAL RESEARCH COMPANY of 2-91-1, Honjo Naka, Higashi-Osaka-shi, Osaka, Japan.	Butterfly valve.
9.	148126	25-7-1978	Pandrol Limited, 9, Hoborn, London EC 1N 2NE, England.	Apparatus and a method for bending rods in making railway said fastening clips.
10.	148170	27-7-1978	I.S.C. Smelting Limited, of 6 St. Jame's Square, London SW1Y 4LD, England.	Improvement in or relating to tuyeres for blast furnaces and furnaces having such tuyeres installed therein.
11.	148171	1-8-1978	CHARCON TUNNELS LIMITED, of South Well Lane, Kirkby-in-Ashfield, Nottinghamshire NG 17 8 FN England.	Improvements in or relating to wall segments.
12.	148185	31-5-1977	TESA S. A. of Rue Bugnon 38, 1020 Renens, Switzerland.	Measuring gauge.
13.	148186	19-8-1977	KEARNEY-TRECKER CORPORATION, 1103, Theodore Trecker way, West Allis, Wisconsin 54214, U.S.A.	Machine tool with counter posed rotary tool heads carrying cross feed tool slides.
14.	148195	13-6-1977	C. EUGEN MAIER, Metallverarbeitung, GMBH, Friedrichlist-Str. 41-D-7012, Fellbach, F.R.G.	A flyer for yarn or thread winding machines.
15.	148203	21-7-1978	LODGE-COTTRELL LIMITED, of George Street, Parade, Birmingham B3, 1QQ, England.	Improvements in or relating to fume extraction.
16.	148204	4-8-1978	Do.	Improvements in or relating to gas treatment plant.
17.	148221	17-8-1977	MITSUBI TOATSU CHEMICALS INC. ETC. of 2-5, 3-chome, Kosumig-seki, Chiyoda-ku, Tokyo, Japan.	Composite multi-stage pump.

1	2	3	4	5
18.	148223	3-10-1977	DEVLEIG MACHINE COMPANY, Fair Street, Royal Oak, Michigan, 48068, U.S.A.	Pre-settable tool supporting device.
19.	148232	30-1-1978	KRAFTWERK UNION AG, 4310, Mulheim (Ruhr), Wiesenstr. 35, German Federal Republic.	Radial plain bearing for a rotating shaft.
20.	148253	2-7-1977	NRM CORPORATION, of 4200 Gillchrist, Street, P. O. Box 6338, Akron, Ohio, 44312, U.S.A.	Tire curing press.
21.	148259	13-12-1977	TESA S. A. of Rue Bugnon 38, 1020, Renens, Switzerland.	Flat segment level lever for micrometer and gauges.
22.	148264	4-4-1978	DR. C. OTTO & CO. GMBH, of Christstrasse 9, 4630 Bochum, West Germany.	A gas generator operating under pressure and at high temperature.
23.	148268	8-5-1978	MRS. PARAMITA BASU, 16, Princess Street, Calcutta 13, State of West Bengal, India.	An actuator.
24.	148279	6-2-1978	KLEIN-SCHANZLIN & BECKER AG, Postfach 225, Johannklein Strasse 9, D-6710, Frankenthal (Pfalz) F. R. G.	Heat barrier means for high temperature circulating pumps.
25.	148291	27-7-1977	HIROSHI ISHIZUKA, of 19-2, Ebara, 6-Chome Shingawa-ku, Tokyo, Japan.	Apparatus for sewing stone.
26.	148294	10-10-1977	PALITEX PROJECT-COMPANY, GMBH, of Wocserweg 8, 4150 Krefeld, West Germany.	Apparatus for the take-up and tension free reissue of a given length of thread.
27.	148311	19-9-1977	THE AIR PREHEATER CO. LTD, Andover Road, Wells Ville, New York, U.S.A.	Rotary regenerative heat exchange apparatus having a rotor of heat absorbent material.
28.	148316	22-8-1978	AUTOMOTIVE PRODUCTS LIMITED, Tachbrook Road, Leamington Spa., Warwickshire, CV 31 3 ER, England.	Diaphragm spring clutches.
29.	148333	14-4-1977	I. S. C. SMELTING LIMITED, of 6 St. James's square, London SW 1 Y 4LD England.	Blast furnace charging apparatus.
30.	148350	18-5-1977	MANNESMAN DEMAG AKTIENGESELLSCHAFT, of Wolfsgasseuter Platz, D-4100 Duisberg, F.R.G.	Mixing bed pile apparatus with bladed pipe pick-up.
31.	148351	26-6-1977	INDIAN HEAD, INC. 1211 Avenue of the Americas, New York, 10036, U.S.A.	Improvements in or relating to a brake actuating device.
32.	148368	1-12-1977	INTERCANE SYSTEMS INC. 2679, Howard Avenue, Windsor, Ontario, N 8X, 3X2, Canada	An apparatus for separating the pith and rind component of sugarcane stalk.
33.	148373	17-2-1978	MARIO POSNANSKY ETC. of Melchenbuchweg 18, 3006 Bern, Canton of Bern, Switzerland.	Vacuum flask.
34.	148394	25-1-1977	SAUNDRES VALVE COMPANY LTD. of Gwambran, Gwent NP 4 3XX Wales.	Method of forming an injection moulded functional lining on a valve body.
35.	148406	9-12-1977	HACOPA TEXTILMASCHINEN GMBH & CO. KG. of 5600, Wuppertal 2, Federal Republic of Germany.	Bobbins for thread-form or strip form material.
36.	148408	21-2-1978	YOUNGFLEX S. A. of 1, Rue Fries, 1701 Fribourg, Switzerland.	Cushion support element.
37.	148411	11-5-1978	EADIE BROS & CO. LTD. Victoria Works, Paisley, County of Renfrew, Scotland.	Improvements in travellers for ring spinning.

1	2	3	4	5
38.	148414	28-2-1978	USM CORPORATION 126, Colt Highway, Farmington, Connecticut, U.S.A.	A machine for turning article.
39.	148419	20-1-1978	GENERAL ELECTRIC COMPANY, 1, River Road, Schenectady, State of New York 12305, U.S.A.	Temperature resistant machine tool component and method for making same.
40.	148420	1-6-1978	STOPNIC AKTIENGESSELLSCHAFT, of Baarestrasse 43, 6300 Zug/Switzerland.	Sliding gate nozzles and metallurgical vessel containing such nozzles.
41.	148421	2-2-1978	USS ENGINEERS AND CONSULTANTS, INC. of 600 Grant Pittsburg, State of Pennsylvania, U.S.A.	Improves slide gate valve apparatus.
42.	148424	21-5-1975	GIRLING LIMITED, of Kings Road, Tyseley Birmingham 11, England.	Improvements in vehicle brakes.
43.	148442	20-3-1978	CONTRAVER AG. of Schaffhauserstrasse 589, 8052 Zurich, Switzerland.	Solar heat collector.
44.	148444	21-2-1978	USS ENGINEERS AND CONSULTANTS, INC. of 600 Grant Street, Pittsburgh, State of Pennsylvania, U.S.A.	Positive displacement pump for handling a suspension of particles.
45.	148472	16-2-1977	VERSON ALSTEEL PRESS COMPANY, of 8300 South Central Expressway, Dallas, Dallas county, Texas, U.S.A.	Low inertia clutch and brake system.
46.	148476	16-3-1978	SANDVIK AKTIEBOLAG, Fack 5-811 01, Sandviken 1, Sweden.	Drill bit.
47.	148480	3-4-1978	TESAS A. Rue Bugnon 38, 1020 Renens, Switzerland.	Interior gauge for measuring the diameter of bores of machined workpieces.
48.	148489	6-7-1977	ROBERT EMILE JUSTIN CASSOU & ETC. Rue Clemenceau, 61300 L'Aigle, France.	Injecting gun for animals in particular for the artificial insemination of cattle.
49.	148496	3-10-1977	BINSHELLS NEW SYSTEM LTD. of St. Julians Court--St. Peter, Port-Guernsey-channel Islands, Italy.	Method and apparatus for erecting substantially dome-like building structures.
50.	148503	20-4-1978	REEVES BROTHERS INC. 1271 Avenue of the Americas, New York, State of New York, U.S.A.	Centrifugal process for production of polyurethane foam and apparatus therefor
51.	148508	20-6-1978	UOP INC. at UOP Plaza-Algonquin and Mt. Prospect Road's, Des Plaines, Illinois, U.S.A.	Channel base well Screen.
52.	148511	1-4-1977	HIROSHI ISHIZUKA, of 19-2 Ebara 6-chome, Shinegawa-ku, Tokyo, Japan.	Apparatus for sawing stone.
53.	148514	8-6-1977	BUREAU BBR LT., of Riesbachstrasse 57, Zurich, Switzerland.	A wedge push-in apparatus for a wire tensioning press.
54.	148522	20-9-1977	COMBUSTION ENGINEERING INC. 1000, Prospect Hill road, Windsor, Connecticut, U.S.A.	A steam generating unit having buckstay arrangement as support means for the walls thereof.
55.	148523	21-9-1977	KABEL UND METALLWERKE GUTENFELD-GSHUTTE, AG. 3000, Hannover, Postfach 260, Vahrenwalder, Strasse 271, West Germany.	Method of producing copper clad steel wire.
56.	148540	20-1-1978	AKTIEBOLAGET MEDLINE, of Wallingatan 37, S-111 24 Stockholm, Sweden.	Device for at least temporary occlusion of body channels.

1	2	3	4	5
57.	148547	1-6-1978	IMTERSTOP A. G. of Baarerstrasse 43, 6300 Zug/Switzerland.	A sliding gate nozzle for vessels used for pouring metals.
58.	148557	22-2-1978	TESA S. A. of Rue Bugnon 38, 1020 Renens, Switzerland.	A shock absorbing device for use in dial measuring instruments.
59.	148562	18-4-1978	BICC PUBLIC LIMITED COMPANY, of Bloomsburg, street, London W.C. 1 B, 3, Q N, England.	Method and apparatus for continuously casting unrefined electrodes in quantity for use in the electrolytic refining of metal.
60.	148580	28-9-1978	BRAKES INDIA LTD. of Padi, Madras-600050, India.	A brake fluid reservoir of a hydraulic braking system.
61.	148594	29-6-1977	SOCIETE INTERNATIONALE, DE MECANIQUE INDUSTRIELLE S.A. of 37 rue Notre-Dame-Luxembourg.	Improvements in centrifugal pumps.
62.	148604	18-11-1977	NRM CORPORATION, of 3200 Gilchrist Road, P. O. Box 6338, Akron, Ohio 49312, U.S.A.	Post cure tire inflator.
63.	148612	19-12-1977	MAC GREGOR INTERNATIONAL S. A. of St. Jacobs stresse 9, 4002 basle, Switzerland.	Improvements in or relating to a device for rectifying or extending a movable access ramp.
64.	148613	26-12-1977	CHRISTOPHER TILLOTSON BROWN, 1, Yarrabung Road, St. Ives, New South, Wales 2075, Australia.	An improved armour unit for wave energy absorption.
65.	148617	14-12-1977	KNORR-BREMSE GMBH, of Moosacher Stresse 80, 8000, Munchen 40.	Brake accelerator for compressed-air brakes especially for rail vehicles.
66.	148622	20-4-1978	RUHRKOHLE AKTIENGESELLSCHAFT, ETC. of Rellinghauser Str. 1, 4300, Essen West Germany.	A method for taking in and taking away gases leaking during coking and device therefor.
67.	148667	2-8-1978	JOHN DEREK GOEST, of "Iona" cannon Hill, Way, Bray Maidenhead, Berkshire, England.	Improvements in or relating to couplings for tubes.
68.	148669	24-8-1978	UNION CARBIDE CORPORATION, of 270 Park avenue, New York, State of New York-10017, U.S.A.	Process and apparatus for thermomechanically scruffing a metal workpieces.
69.	148673	23-10-1978	AHMEDABAD TEXTILE INDUSTRIES RESEARCH ASSOCIATION, P. O. Polytechnic, Ahmedabad-15, Gujarat, India.	Opto-electronic yarn fault detector and cleaner.
70.	148701	3-4-1976	FORGEAL SOCIETE POUR LE FORGEAGE ET 1, ESTAMPAGE BES ALLIAGES LAGERS. of 23 Rue Balzac Paris 8e, France.	Process for manufacturing monobloc wheels by die stamping and monobloc wheels made thereby.
71.	148702	3-4-1976	Do.	Process for manufacturing monobloc wheels by die stamping and rotary extrusion.
72.	148706	30-5-1978	SOCIETE NOUVELLE DES ECHAUDAGFIS TUBULAIRES MILLS, of 82 rue Edouard-Vaillant, 93350 Le Bourget, France.	An assembly element.
73.	148709	21-10-1978	JOHNSON & JOHNSON, of 501 George Street, New Brunswick, NEW U.S.A.	A water resistant orthopaedic bondage.
74.	148710	19-4-1979	PERSONAL PRODUCTS COMPANY, of Milltown, New Jersey, U.S.A.	Sanitary napkins.
75.	148734	13-4-1978	QUIGLEY COMPANY, INC. 235, East 42nd Street, New York, State of New York, U.S.A.	Method of prolonging lining of an ACD furnace lined with a magnesia, type refractory.

COMMERCIAL WORKING OF PATENTED INVENTION

MECH. ENGG. XIII. LIST

The following Patents in the field of Mechanical & General Engineering Industry are not being commercially worked in India as admitted by the Patentees in the statements filed by them under section 146(2) of Patents Act, 1970, in respect of calendar year 1983 generally on account of want of requests for licences to work the Patented inventions. Persons who are interested to work at the said patents commercially may contact the Patentees for the grant of a licence for the purpose.

Sl. No.	Patent No.	Date of Patent	Name and Address of Patentees	Title of the Invention.
1	2	3	4	5
1.	148743	8-7-1977	VIRGIL STARK, 936 Fifth Avenue, New York, New York, 10021.	A collector for an apparatus for concentrating and collecting solar energy and the apparatus incorporating the same.
2.	148753	19-8-1977	DUNLOP LIMITED, Dunlop House, Rydor Street, St. James's, London SW 1, England.	Improvements in or relating to springs.
3.	148762	8-8-1977	USS ENGINEERS AND CONSULTANTS, INC. 600, Grant Street, Pittsburgh, State of Pennsylvania, U.S.A.	A nozzle for preventing alumina build-up during continuous casting of aluminium killed steel.
4.	148770	1-8-1978	FERODO LIMITED, 20, St. Mary's Parsonage, Manchester M3 2NL, England.	Process for the manufacture of friction Components.
5.	148772	3-8-1978	Do.	Process for the manufacture of friction components.
6.	148776	23-8-1978	WERKZEUGMASCHINEN OERLIKON-BUHLER AG, Birchstrasse 155, 8050, Zurich, Switzerland.	Three pressure control valve for an indirectly acting compressed air brake.
7.	148777	23-8-1978	Do.	Control valve for an indirectly acting compressed air brake of type used in rail vehicles.
8.	148778	28-8-1978	GIRLING LIMITED, of Kings Road, Tyseley, Birmingham 11, England.	Improvements in spreading disc brakes for vehicles.
9.	148818	7-9-1978	SENTRALINSTITUTT FOR INDUSTRIELL FORSKNING, of Forskningsvein 1, Oslo 3, Norway.	A system for concentrating water wave energy.
10.	148823	14-9-1978	LINDAUER DORNIER G.M.B.H. of 8990 Lindau, West Germany.	Method and a loom for the production of a double pile fabric with single weft insertion.
11.	148833	30-4-1977	MOBIL TYCO SOLAR ENERGY CORPORATION, 16, Hickory Drive, Waltham Massachusetts, U.S.A.	Cartridge and furnace for crystal growth
12.	148836	2-6-1977	MAHLL GMBH, of 26-16 Pragstrasse Stuttgart, Germany (West),	Improvements in or relating to light metal pistons.
13.	148866	20-4-1978	MATREX LIMITED, of Bond avenue Bletchley, Buckinghamshire, England.	Improvements in or relating to steel framed building.
14.	148874	24-4-1978	VICKERS LIMITED, of Vickers House, Mill bank London SW 1, P4 RA, England.	A method of recovering an under water pipe and a recovering line attachment for carrying out the same.
15.	148886	28-4-1977	DR. C. OTTO & COMP, GMBH of Bochum, West Germany.	A system for handling dust-laden gases emitted from the oven chambers of a oven battery during the charging thereof with coal to be carbonised.
16.	148889	17-6-1977	THOS. STOREY (ENGINEERS) LIMITED, of 8 South wharf Road, London W2 1PB England.	Prefabricated panels for bridges.
17.	148897	17-12-1977	WM. R. STEWART & SONS (HACKLOMAKERS) LTD., of Marine Parade, Dundee DD 3, D. Scotland.	Rotary steel cutting device.
18.	148907	10-5-1978	E. J. PRICE (DEVELOPMENTS) LTD., of 71 Melchett Road, Birmingham, Factory, Centre, Kings Norton Birmingham, B 303 3 HL, England.	Foot pumps.

1	2	3	4	5
19.	148915	6-1-1978	VOITH GENTRIEBE KG. Alexander Strasse 2, D-7920, Heidenheim, F.R.G.	Hydrodynamic torque converter which is also employable for braking.
20.	148924	25-5-1978	BRITISH STEEL CORPORATION, 33, Grosvenor place, London S.W.1, England.	Method of surfacing circular section of metal members and a metallic roll or wheel so surfaced.
21.	148950	19-12-1977	MARTIN ENGINEERING COMPANY of Route 34 Neponset, Illinois 61345, U.S.A.	Conveyor belt cleaner blades mounting arrangement.
22.	148955	30-6-1978	SUSHIL CHANDRA SRIVASTAVA, Qr. No. 91, B.I.T. P. O. Mesra, Dist. Ranchi, Bihar (India).	Pump.
23.	148962	6-10-1978	NIPPON CLEAN ENGINE RESEARCH INSTITUTE CO. LTD. of 205-3, Kiyasue-che, Kanazawa-shi, Ishikawa-ken, Japan.	A generator blower.
24.	148974	28-9-1979	BRAKES INDIA LIMITED, of Padi, Madras-600050, Tamil Nadu, India.	A self-operative device for adjusting the brake lining with respect to brake drum of a braking system.
25.	148930	3-1-1978	NADELLA of 133-137 Boulevard National 92505, Rueilmalmaison, France.	Handle bar steering head set assembly for bicycles and the like.
26.	149019	21-8-1980	CARBORUNDUM UNIVERSAL LIMITED, of 28, Rajaji Salai Madras-600001, Tamil Nadu, India.	An improved abrasive grinding wheel and a process for manufacturing the same.
27.	149028	7-10-1977	PALITEX PROJECT-COMPANY GMBH of Weesawsg 8, 4150 Krefeld, West Germany.	Two-for-one double twisting machines.
28.	149033	10-3-1978	NIPPON STEEL CORPORATION, No. 6-3, 2-chome, Otemachi, Chiyoda-ku, Tokyo, Japan.	A shaft furnace.
29.	149040	25-5-1978	ETHICON INC. of Somerville, New Jersey, U.S.A.	A package for multistrand surgical suture.
30.	149046	9-5-1977	UNION CARBIDE CORPORATION, of 270 Park Avenue, New York, State of New York, 10017, U.S.A.	Method and apparatus for making an instantaneous thermochemical start.
31.	149049	3-2-1978	SCHUBERT & SALZER MASCHINENFABRIK AKTIENGESELLSCHAFT, Friedrich-Ebert-Strasse 84, 8070, Ingolstadt, West Germany.	Device for stopping the rotor of an open end spinning apparatus.
32.	149050	26-4-1978	COMBUSTION ENGINEERING INC. Prospects Hill Road, Windsor, State of Connecticut, U.S.A.	Furnace having a central combustion chamber with a plurality of burners adapted to exhaust fuel and air mixture tangentially into said.
33.	149053	11-8-1978	SIEMENS AG. Berlin & Munich, West Germany.	Printers with means for synchronizing type carrier.
34.	149098	17-3-1979	AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION of p.o. Polytechnic, Ahmedabad-380015, Gujarat, India.	An improved process for imparting flame-retardancy to cellulosic fibres/fabrics and/or thin blends with synthetic fibres.
35.	149109	22-7-1977	KRAFTWERK UNION AG. 4330, Mulheim (Rbhr) Wissenstr. 35, Federal Republic of Germany.	A rotor assembly for a gas turbine.
36.	149113	1-6-1978	IMTERSTOP AG. of Baarerstrasse 43, 6300 Zug/Switzerland.	Sliding closures arrangement for a discharge passage in the bottom of a casting ladle for other containers for molten metal.
37.	149137	4-11-1978	BELOIT CORPORATION, of Beloit, Wisconsin 53511, U.S.A.	A paper web processing machine for coating same.
38.	149138	30-12-1977	FESTO-MASCHINENFABRIK GOTTLIEB STOLL, of Ulmer Strasse 48 Esslingen, West Germany.	Fluid transfer apparatus.
39.	149139	25-1-1978	RUEGER SA. Chemin De Mongevon 9, 1023, Crissier Lausanne/Switzerland.	Cooking thermometer.

1	2	3	4	5
40.	149153	8-8-1978	KRAFT WERK UNION-AKTEENGES- SELLSCHAFT, of 433 Mulheim Ruhr) Wiessnster. 35, F.R.G.	Steam generator.
41.	149157	2-9-1978	HANOTA HOLDINGS S. A. 37, rue Notre-Dame Luxembourg, Grand-duchy of Luxembourg.	Building block set and method of build- ing block sets.
42.	149159	6-12-1977	E. I. DU PONT DE NEMOURS & CO. of Wilmington, Delaware, U.S.A.	Low energy explosive connecting cord and cord manufacturing method and apparatus.
43.	149160	7-12-1977	MAC GREGOR INTERNATIONAL S. A. of St. Jakobs Strasse 9, 4032 Basel, Switzerland.	Improvements in or relating to a device for opening hatch covers or the like com- posed of panels.
44.	149175	4-11-1978	BELOIT CORPORATION, of Beloit Wisconsin 53511 U.S.A.	Improvements in dryer drums for drying.
45.	149177	17-8-1977	TELEHOIST LIMITED, Manor Road, Cheltenham, England	Telescopic mechanism and multistage hydraulic ram including the same.
46.	149180	2-1-1978	CHICAGO PNEUMATIC TOOL COM- PANY, of East 44th street, New York, N.Y. U.S.A.	Hydraulic powered rock drill.
47.	149184	14-11-1979	SHROFF PILLAPPA VENKATASUB- BLAH, of No. 12 Thimmareyasetty Lane, Nagarthpat Crose, Bengalors 360002, Marnataka State, India.	An apparatus for discharging liquid in a measured quantity.
48.	149189	13-10-1978	LAWRENCE RUDDLIF SPERBERG. of El Paso, Texas, U.S.A.	Improvements in pneumatic tyres.
49.	149198	10-10-1977	PALITEX PROJECT-COMPANY GMBH of Wooserweg 8, 4150 Krefeld, West Germany.	Two for one twisting machine.
50.	149199	1-11-1977	TEX INNOVATION AB OF P. O. BOX 5036, S-42105, Vastra, Frolunda 5, Swe- den.	Method of producing a conditioned fibrous materials with reduced tendency to wrinkle due to vacuum packaging and if desired vacuum packing the so obtained materials
51.	149203	1-11-1977	TEX INNOVATION AB OF P. O. BOX 5036, S-42105, Vastra, Frolunda 5, Sweden.	Apparatus & method for packaging or wrapping systems.
52.	149226	13-9-1978	COMPUSTION ENGINEERING INC. of 1000 Prospect Hill Road, Windsor, Connecticut, U.S.A.	Improvements in gate valves for use in large size ducts having an obstruction such as an inner pipe extending there through.
53.	149236	16-6-1980	BRAKES INDIA LIMITED, of Padi, Madras-600 050, India.	An improved cam brake.
54.	149253	24-8-1978	THE AIR PREHEATER CO. INC. Andover Road, Welks ville, New York, U.S.A.	A rotory regenerative heat exchange apparatus.
55.	149290	9-7-1980	CEMINDIA COMPANY LTD. Stell- crete House, Dinshaw Vachha Road, Bombay-400 020, Maharashtra, India.	Pile and linear assembly process for the manufacture thereof and method of piling employing such assembly.
56.	149294	5-7-1979	Do.	A servo booster assembly for a vehicle braking system.
57.	149295	5-7-1979	Do.	A servo booster for a vehicle braking system.
58.	149296	5-7-1979	Do.	A servo booster assembly.
59.	149297	5-7-1979	Do.	A servo booster for a vehicle braking system.
60.	149298	5-11-1980	Do.	Improved method of piling with precast piles and piles constructed by the said method.

1	2	3	4	5
61.	149302	23-6-1977	TERSA S. A. of Rue Bugnon 38, 1020 Renens, Switzerland.	Micrometer head for internal measurement instrument.
62.	149306	11-1-1978	DURAMETALLIC CORPORATION, 2104, Factory Street, Kalamazoo, Michigan, U. S. A.	Improvements in a bypass flush system for a mechanical seal assembly.
63.	149307	12-4-1978	ESMIL B. V. of Stations street 48, Amersfoort, The Netherlands.	Heat exchanger.
64.	149325	28-5-1977	DUNLOP LIMITED, of Dunlop House, Rydler Street, St. James's London SW1, England.	Improvements to tyre and wheel rim assemblies.
65.	149328	12-8-1977	UNION CARBIDE CORPORATION, 270, Park avenue, New York, State of New York, 10017, U. S. A.	Apparatus for refining molten metal.
66.	149332	16-2-1978	GELENKWELLENBAU GMBH, Westendh—7-9, 4300 Essen I. F. R. G.	A bearing system for a universal joint.
67.	149356	7-2-1978	KEEIN SCHANZUN & BECKER AG, Postfach 225, Johann-klein Strasse 9, D-6710, Frankenthal (Pfalz), F. R. G.	Slidable sealing rings for shaft of fluid pumps subject to thermal shocks.
68.	149382	22-8-1980	VELLAIAPPAN VELAYUDAM THANGA THIRUPATHY of No. 13, Sadasva Pillai Lane, Chintadripet, Madras-600 002, Tamil Nadu, India.	A safety device for use in air or spacecrafts.
69.	149385	8-3-1978	MAC GREGOR INTERNATIONAL S. A. 7, Jakobstrasse, Basle, Switzerland.	Cover arrangement for a storage container e.g. ships, hatches, railwagons and the like.
70.	149294	8-2-1980	LUCAS INDUSTRIES LIMITED, of Great King Street, Birmingham 19, England.	A vehicle disc brake assembly.
71.	149395	19-2-1980	PILLAPALAYAM N. MURALIDHARAN & ETC F-1, 'Faith' Apollo, Avenue, Bessant Nagar, Madras-600090, Tamil Nadu, India.	An improved torque meter.
72.	149396	17-2-1978	CUMBUSTION ENGINEERING INC. of Prospect Hill Road, Windsor, State of Connecticut, U. S. A.	An apparatus for the burning of a pulverized coal.
73.	149398	1-6-1978	STOPING AKTIENGESSELISHAFT of Baarepstrasse 43, 6300 Zug/Switzerland.	A sliding gate arrangement for the tap-hole of a metallurgical vessel or furnace.
74.	149399	2-6-1978	COMBUSTION ENGINEERING INC. 1000, Prospect Hill Road, Windsor, Connecticut U. S. A.	A coal gasifier and a method of obtaining enriched heating gas therefrom.
75.	149410	8-9-1978	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, Rafi Marg, New Delhi-1, India.	A compact device for the simultaneously measuring the settlement characteristic of building & like civil engineering structures.

COMMERCIAL WORKING OF PATENTED INVENTIONS

MECH. ENGG. LIST—XIV

The following Patents in the field of Mechanical and General Engineering Industry are not being commercially worked in India, as admitted by the Patentees in the statements filed by them under section 146(2) of Patents Act, 1970 in respect of calendar year 1983 generally on account of want of requests for licences to work the Patented inventions. Persons who are interested to work the said Patents commercially may contact the Patentees for the grant of a licence for the purpose.

Sl. No.	Patent No.	Date of Patent	Name of the Patentees	Title of the invention
1	2	3	4	5
1	149418	11-10-1977	SEALED POWER CORPORATION 2001, Sanford Street, Muskegon, Michigan 49443, U.S.A.	A slip latch in combination with a circular spacer-expander for use in a piston oil control ring.
2	149419	11-10-1977	Do.	Do
3	149420	11-10-1977	Do.	A parted circular spacing expander for use in a piston oil control ring.

1	2	3	4	5
4	149423	19-1-1978	STOCZNIA SZCZECINSKA IM ADO-LFA WRSKIEGO of ul. Hulmowa 1, Szczecin, Poland	Ship Hull
5	149424	21-3-1978	COMBUSTION ENGINEERING INC. 1000 Prospect Hill Road, Windsor, Connecticut, U.S.A.	A furnace system for firing pulverized coal in a system generator.
6	149425	25-5-1978	AKTIENGESELSCHAFT KUHNLE KOPP & KAUSCH of Friedrich Ebert-Str 16. 6710, Frankenthal/Pfalz, F.R.G.	Gas turbine particularly exhaust gas super turbo charger.
7	149427	18-1-1980	LUCAS INDUSTRIES LIMITED, Great King Street, Birmingham 19, England.	Improvements relating to twin-pin sliding caliper disc brakes.
8	149446	24-6-1978	WONTER MAURITZ, of D-5461 Kalerborn bei Linz/Rhein, West, Germany.	Forehearth with weir
9	149461	17-1-1978	PATPAN INC c/o ICAZA GONZALEZ RUIZ & ALEMAN CALLE, Aquilino De la Cuardia No. 8, Panama city, Panama.	Apparatus for drying flat articles of porous material under vacuum.
10	149462	9-6-1978	MESSIER-HISPANO-BUGATTI of 5 rue Louis Lejeune, 92120 Montrouge, France	Wing mounted retractable aircraft under carriage.
11	149471	17-5-1978	PAUL OPPRECHT, of Im Hinteren Dornold 8962, Bergdistikon/Switzerland	Transport installation for can bodies for a fully automated resistance welding machine.
12	149493	8-3-1979	JOHNSON & JOHNSON, 511, George Street, New Brunswick, New Jersey, U.S.A.	Paper surgical tape.
13	149506	19-5-1978	THE PRESTIGE GROUP LIMITED, of Prestige House, 14-18 Holborn London EC 1N 2LQ, England	Improvements in or relating to pressure cookers incorporating relief valve assemblies.
14	149509	14-3-1978	DYCKERHOFF & WIDMANN AG, Erdinger Landstrasse, 1, 8000, Munchen 81, F R G	Device for simultaneously stressing a number of tension elements.
15	149513	2-11-1978	MAHLE GMBH, 26-46, Pragstrasse Stuttgart, Germany (West)	Piston for internal combustion engine having a piston body consisting of light metal and a crown plate.
16	149548	3-11-1978	GEORGE FISCHER AG CH-8201, schaff hausen (Switzerland)	Blade mounting structure for centrifugal wheel.
17	149554	3-4-1978	SCIACKY BROTHERS INC 4915 West, 67th Street, Chicago, Illinois 60638, U.S.A.	A method of constructing rotary drill bits.
18	149556	1-6-1978	PODERWERK GEBR BENTELER, of 4794 Schloss, Neuhaus/Kreis, Paderborn (German Federal Republic)	A controllable teeming valve for dasting ladles.
19	149565	3-4-1978	SCIACKY BROTHERS INC. 4915 West, 67th Street, Chicago Illinois 60638, U S.A.	An apparatus for manufacturing rotary drill.
20	149571	4-9-1980	AHMEDABAD TEXTILE INDUSTRY'S RESEARCH P O Polytechnic, Ahmedabad, 15, Gujarat, India.	Improved slub catcher.
21	149578	6-7-1978	NRM CORPORATION, 91 3200 Gilchrist Road P O BOX 6338, Akron, Ohio 44312, U.S.A.	Tire Building machine
22	149579	5-9-1979	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, Kafi Marg, New Delhi-1, India.	An improved electrolytic process for the preparation of grained aluminium plates for lithographic printing.
23	149581	9-11-1978	SIEMENS AKTIENGESELLSCHAFT Berlin & Munich, West Germany.	Axial fan
24	149597	16-5-1978	HASLER AG, Belpstrasse 23, 3000 Bern 4, Switzerland.	Device for electromechanically positioning a unilaterally pivoted lever arm in three different stable positions.
25	149598	17-5-1978	WESTINGHOUSE ELECTRIC CORPORATION of Westinghouse building Gateway centre, Pittsburgh, Pennsylvania 15222, U.S.A.	Extrudable oil-permeated lubricant wicking material and method of making same.

1	2	3	4	5
26	149606	26-12-1977	BRITISH AEROSPACE PUBLIC CO. 100 Pall, London, England	An arrangement used in take-off flight- dock for an aircraft.
27	149627	30-3-1978	NRM CORPORATION, of 3200 Gil- christ road, P. O. BOX 6338, Akron, Ohio 44312, U.S.A.	Tire component transfer.
28	149638	11-12-1979	LUCAS INDUSTRIES LTD., Great king street, Birmingham 19, England	A railway disc brake assembly.
29	149653	28-7-1978	GELENKWELLENBAU GMBH WES- TENDH, 7-9, 4300 Easson 1, F.R.G.	Means for precise alignment of a weld- ing device.
30	149665	5-10-1978	DR. C. OTTO & COMP. GMBH, of Bochum, West Germany.	West Germany.
31	149669	25-1-1979	DEMAG AKTIENGESELLSCHAFT, of Wolfgang, reuter-Platz, D-4100, Duis- burg, F.R.G.	Tensioning device for tension elements on metallurgical containers especially on interchangeable converters.
32	149674	7-6-1979	BELOIT CORPORATION, Beloit, Wis- consin, U.S.A.	An improved Force Feed lubrication System for doctor bearing for Doctor blades.
33	149676	15-3-1978	ALUMINIUM PFCHINEY, 28, rue de Bonnel, 69003, Lyon, France.	A pneumatic conveying apparatus for conveying pulverulent material.
34	149677	13-2-1978	EXPLOSAIF, S.A. 11, Rue d' Italic- 1211, Geneva 3, Switzerland.	Machine for expanding metal webs.
35	149683	25-1-1979	NRM CORPORATION, 3200, Gilchrist Road, P. O. BOX 6338, Akron, Ohio 44312, U.S.A.	Tire loader.
36	149685	6-4-1979	C.P.I. INTERNATIONAL INC Inter- national Plaza, Englewood cliffs, New Jersey 07632, U.S.A.	Combined dry-wet milling process for refining wheat.
37	149700	3-5-1978	VALMET OY, Punatontkonkatu 2, 00130 Helsinki 13, Finland.	Means for loading and or unloading of dry goods carrying vessels in a cargo handling system.
38	149715	20-8-1975	USS ENGINEERS & CONSULTANTS, of 600 Grant Street, Pittsburgh, State of Pennsylvania, U.S.A.	Method and apparatus for locating improperly positioned or bentrolls.
39	149719	20-3-1978	TIDELAN SIGNAL CORPORATION P. O. BOX 52430, Houston Texas 77052, U.S.A.	Enclosure for solar cell panel and solar cell panel including the enclosure.
40	149722	12-7-1978	VOEST-ALPINE AKTIENGESELLS- CHAFT, A-1011, Vienna, Friedrich- strasse 4, Austria.	Device for sealing the gap between com- ponent parts rotatable relative to each other.
41	149724	18-12-1978	UNITED TECHNOLOGIES CORPO- RATION 1, Flinland Plaza, Plaza, Hart- ford, Connecticut, 06101, U.S.A.	A rotor blade assembly and specifically turbine wheel assembly.
42	149740	16-2-1979	MARTIN ENGINEERING CO. U. S. Route 34 Neponset, Illinois 61345, U.S.A.	Skirt board installation for conveyors.
43	149749	7-12-1977	SAINT GOBAIN INDUSTRIES, Boule- vard Victor-Hugo, Neuilly-Sun-Seine, France.	Process and apparatus for the manufac- ture of fibres from attenuable materials.
44	149757	4-11-1978	BELOIT CORPORATION, Beloit, Wis- consin 53511, U.S.A.	Paper making machine press section.
45	149758	19-2-1979	JOHNSON & JOHNSON, of 501 George Street, New Brunswick, New Jersey, U.S.A.	Layered absorbent structure.
46	149759	19-2-1979	JOHNSON & JOHNSON, of 501 George Street, New Brunswick, New Jersey, U S.A.	A sanitary napkin disposable diaper and catamential lampon having a core of absorbent product.
47	149786	24-5-1976	CLUPAK INCORPORATED, of 530 Fifth Avenue, New York, State of New York 10036, U.S.A.	Nip roll for treating web material and method of manufacturing the same.

1	2	3	4	5
48.	149787	7-8-1978	YAMADA MACHINERY INDUSTRIAL CO LTD 5-1, Ashihara, dori, Hyogo-ku, kabo, Japan.	A portable power reaper.
49.	149794	4-9-1980	AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION of P O Polytechnic, Ahmedabad-380015, Gujarat India.	An improved side-lever underpick mechanism for use in weaving looms.
50.	149798	29-10-1979	LUCAS INDUSTRIES LIMITED, Great king street, Birmingham 19, England.	Brake actuating assembly for a vehicle braking system.
51.	149810	14-3-1978	WEATHERFOPR LAMB INC 17, Briar Hollow, Suite 200, Houston, Texas 77027, U S.A.	An apparatus for making up a threaded connection.
52.	149812	22-4-1978	MITRU KURODA, 16, Momoyame, Mizuno Sakon, Higashimachi, Fushimi-ku, Kyoto, Japan.	A twist detecting device for use in a detwisting apparatus.
53.	149816	4-9-1978	PERSONAL PRODUCTS COMPANY, Mill town, New Jersey, U.S.A.	A method of producing a soft comfortable contamenial tampon sealed in liquid impermeable container or envnvelope.
54.	149834	19-9-1979	LUCAS INDUSTRIES LIMITED, of Great King street, Birmingham 19, England.	A disc brake assembly.
55.	149835	9-1-1980	LUCAS INDUSTRIES LIMITED, Great king Street, Birmingham 19, England.	A friction pad assembly for rail vehicle brakes.
56.	149858	16-11-1978	Combustion Engineering INC. 1000, Prospect Hil Road, Windsor, Connecticut, U.S.A.	Coal fired furnace.
57.	149881	27-12-1978	Do.	Method of forming holes in metal part and extruding nipples therein.
58.	149898	11-12-1979	LUCAS INDUSTRIES LIMITED, Great king Street, Birmingham 19, England.	A disc brakes in rail vehicles.
59.	149921	4-11-1978	BELOIT CORPORATION, Beloit, Wisconsin 53511, U.S.A.	Improvements in winders for winding a roll from a continuous travelling web & more particularly to paper web-winders.
60.	149926	12-5-1978	FESTO-MASCHINENFABRIK GOTTLIEB STOLL, Ulmerstrasse 48, Esslingen A. N. West Germany.	Multiway valve used in pneumatic control systems.
61.	149930	23-11-1978	GEORG FISCHER AG. Schaffhusen, Switzerland.	Melt processing apparatus with tiltable melt receptacle.
62.	149950	4-11-1978	BELOIT CORPORATION Beloit, winconsin 53511, U.S.A.	A winder for winding a continuous travelling web of sheet materia. 1 paper web on to a core.
63.	149954	4-5-1978	NIPPON STEEL CORPORATION, No. 6-3, 2-yhomo, Ohtemachi, Chicoda-ku, Tokyo, Japan.	A gram oriented electromagnetic steel sheet.
64.	149956	27-7-1979	AIKOH CO. LTD., 1-39, Ikenhata. 2-Chome, Taito-ku, Tokyo, Japan.	Lance pipe for refining molten metal.
65.	149960	27-3-1978	CABLE BELT LTD. 3, Glenfinlas Street, Edinburgh, EG 3 YY, Scotland.	Improvement in and relating to a belt conveyor arrangements.
66.	149962	12-10-1978	THOMAS JOHN KERRNEY, 34, Droitwith Road, Worecester, WR 3 7 LH, England.	Paint spray booth instalation with water wash.
67.	149965	4-9-1979	MTSUI TOATSO CHEMICALS INC. AND TOYO ENGINEERING CORPN. Both of No. 2-5, kasumigaseki, 3-chome, chiyoda-ku, Tokyo, Japan.	Device for scrapping off deposits from internal surfaces of elongated tubes.
68.	149966	20-8-1979	METALLGESELL CHAFT AG. 16, Frankfurt A.M. Reuterweg, West Germany.	Sieving roller conveyor for green pellets.

1	2	3	4	5
69.	149968	22-3-1980	LUCAS INDUSTRIES LIMITED, Groat king Street, Birmingham 19, England.	A self energising disc brake.
70.	149994	10-11-1978	BURROUGHS CORPORATION, Bur- roukhs Place, Detroit, Michigan 48232, U.S.A.	A business equipment machine having a number of sub-components adapted for separate mounting within this machine.
71.	150004	12-9-1979	SINTOKOGIO LIMITED, Toyota Bldg. 7-23, Meicki-4-chome, Nakamura- ku- Nagoya, Japan.	Molding machine.
72.	150025	25-7-1979	Do.	Molding apparatus.
73.	150046	11-12-1979	LUCAS INDUSTRIES LIMITED, Great king Street, Birmingham 19, England.	Master cylinder and reservoir assembly.
74.	150081	24-6-1980	WONTER MAURITZ, D-5461 Kalen born bei Linz/Rhein, West Germany.	Runner gate for casting molten materies.

MECH. & GEN. ENGG.

COMMERCIAL WORKING OF PATENTED INVENTIONS

The following Patents in the field of Mechanical Engineering Industry are not being commercially worked in India as admitted by the Patentees in the statements filed by them under section 146(2) of the Patents Act, 1970 in respect of Calendar year 1983 generally on an account for licences to work of want of requests, the said Patents commercially may contact the Patentees for the grant of a licence for the purpose.

Sr. No.	Patent No.	Date of Patent	Name & Address of the Patentee	Title of the Invention
1	2	3	4	5
1.	150082	28-6-1978	GENERAL ELECTRIC COMPANY, 1, River Road, Schenectady 5, New York, U.S.A.	Annular metal cutting die of titanium coated tool steel and method of cutting metal rods.
2.	150083	11-7-1978	HANS ULRICH KLINGEBERG, 3274 St. Nicolas bei Morzigen Canton of Berne, Switzerland.	Watchcase.
3.	150104	13-10-1978	THE BRITISH UNITED SHOE, MACHINERY COMPANY LTD, Union Works, Balgrave Road in the city of Leicester, England.	Improvements in or relating to methods and apparatus for production of stiff- fened shoe upper.
4.	150110	22-8-1979	SINTOKOGIO LTD., Toyota Bldg., 7- 23, Meicki-4-chome, Nakamura-ku, Nagoya, Japan.	Method of and apparatus for molding a drag mold part.
5.	150116	7-6-1978	KRAFTWERK UNION AG. 4330, Mulheim (Ruhr) Wiesenstr. 35. West Germany.	Damping arrangement for turbo machine rotors.
6.	150144	4-5-1978	KAMYR AG. Verkstadsgatan 10. 5-65, Karlstad, Sweden	A centrifugal pump apparatus for pump- ing fibre suspension.
7.	150150	9-8-1978	WINFRIED JEAN WERDING, 77, av. du. General Guidson, 1009-Schitzerland.	Spray nozzle for dispensing liquids.
8.	150156	8-3-1979	TORAY SILICONE COMPANY LTD., Nihonbashi-Muomachi 2-chome chvo- ku, Tokyo, Japan.	A moisture impermeable package for room temperature curing one part sea- lants.
9.	150157	21-3-1980	CUMBUSTION ENGINEERING INC 1000, Prospect Hill Road, Windsor, Con- necticut, U.S.A.	Combination of a fluidized bed reactor including a grid plate and means for introducing particulate matter on the upper surface of the grid plate.
10.	150169	16-11-1978	TESA SA. Rue, Bugnon 38-1020, Renens, Switzerland.	Dial measurement gauge.
11.	150176	18-11-1980	ANIL ANANTHKRISHNA. c/o A. K. ANANTHKRISHNA, 14 Alexander, Street, Richmond Town, Bangalore- 560025, Karnataka, India.	A power propelling attachment for a vehicle.

1	2	3	4	5
12.	150178	9-1-1980	LUCAS INDUSTRIES LIMITED, Great King Street, Birmingham 19, England.	Control valve assembly.
13.	150192	10-11-1978	LODGE-COTTRELL LIMITED, George street Parade, Birmingham B3 1QQ, England.	Improvements in or relating to fume containment.
14.	150201	15-2-1980	SUDHIR KUMAR DHAR, La Villa Rouge, J. C. Mallick Road, P. O. Dhanbad, Bihar, India.	Water level indicator.
15.	150211	26-8-1978	ALLWARE AGENCIES LIMITED, C/o. Whitney Marray & Co. 57, Chiswell Street, London EC 1Y 4SY England.	Clutch mechanism and fans comprising the same.
16.	150217	13-6-1978	SOCIETE DE PARIS ET DU RHONE, 36, Avenue, Jean Mermoz, 69008, Lyon, France.	Drive pinion assembly.
17.	150224	5-10-1978	NORTON COMPANY, 1, New Bond Street, Worcester, State of Massachusetts, U.S.A.	A tuned packing element for use in gas/liquid contact.
18.	150245	3-11-1978	MOBIL TYCO SOLAR ENERGY CORPORATION, 16, Hickory Drive Watham Massachusetts, U.S.A.	Manufacture of solar cells.
19.	150255	19-7-1979	MRS. NANDINI NIRANJAN TORASKAR, Flat No. D-Arsenal Flats, Poonah 411001, State of Maharashtra, India.	A casing for carrying helmets and the like articles on two wheeled vehicles.
20.	150265	28-11-1979	GIRLING LIMITED, Kings Road, Tyseley, Birmingham 11, England.	Brake actuator.
21.	150293	17-6-1978	SCHUBERT & SALZER MASCHINEN FABRIK AG, Friedrich-Ebert-Strasse 84, 7008 Ingolstadt, West Germany.	Method and apparatus for producing thread in open-end spinning apparatus.
22.	150297	4-10-1978	EDUARD KUSTERS, Gustav-Funders-Weg 18, 4150 Krefeld, F.R.G.	Improvements in and relating to a roller for the pressure treatment of a web material.
23.	150298	20-2-1979	COMBUSTION ENGINEERING INC. 1030, Prospect Hill Road, Windsor Connecticut, U.S.A.	A fluidized bed boiler with means for delivering fluidizing air to the bed of the boiler.
24.	150330	29-1-1979	COMBUSTION ENGINEERING INC. 1000, Prospect Hill, Road, Windsor, Connecticut, U.S.A.	A device for supplying flux to a submerged welding arc.
25.	150339	21-11-1978	I. S. C. SMELTING LIMITED, 6 St. James's Square London SW 1Y, 4 LD, England.	Method of smelting zinc in a blast furnace.
26.	150345	6-12-1978	GIRLING LIMITED, Kings Road, Tyseley, Birmingham, 11, England.	Improvements in disc brakes for vehicles.
27.	150356	17-11-1979	LUCAS INDUSTRIES LTD., Great King Street, Birmingham 19, England.	Servo boosters for vehicle braking systems.
28.	150358	5-3-1980	Do.	A brake friction pad or shoe assembly.
29.	150363	9-8-1978	E. I. DU PONT DE WEMOURS & CO. Wilmington, Delaware U.S.A.	A method of anchoring or fixing a reinforcing member in a hole and a compartmental package grouting system for use therein.
30.	150393	18-10-1978	LE COMMISSARIAT ALEGERGIE ATOMIQUE, 31-33, Rue caumar tin, Paris, France.	Process for producing a composite element comprising sheet members secured to a support and such composite element.
31.	150402	29-12-1978	SOCIETE NATIONALE DES POU-DERES ET EXPLOSIVES, 12, Quai Henri IV, 75181, Paris, cedex 04, France.	A device for receiving or holding a propellant powder.
32.	150405	18-3-1980	ASHOK LEYLAND LIMITED, Ennore, Madras 600057, Tamil Nadu.	An automotive vehicle body assembly.
33.	150212	7-12-1978	HARDIGG INDUSTRIES INC. South Dearfield, State of Massachusetts, U.S.A.	Apparatus and process for improving a heat-welded junction formed between two thermoplastic materials.

1	2	3	4	5
34.	150423	12-1-1981	DR. JOSE SAMUEL ETC. Head of the Department of Agricultural Engineering, College of Agriculture, Vellayani, 695522, Kerala State, India.	A self propelled device for multiplying unit and for harvesting floating type aquatic weeds.
35.	150454	21-2-1980	KIRLOSKAR OIL ENGINES, LAXMANRAO KIRLOSKAR ROAD, KHADKI, Pune, 411003.	An improved inlet manifold for use in compression ignition internal combustion engine operating on bifuel.
36.	150461	8-2-1980	LUCAS INDUSTRIES LTD, Great King Street, Birmingham 19, England.	A friction lining wear indicator for shoe drum brake.
37.	150475	10-11-1978	CABLE BELT LTD, 3 Glenfinlass Street, Edinburgh, EG, 3 6YY, Scotland.	A method of joining two rope lengths together by splicing and spliced rope lengths.
38.	150494	5-8-1978	SMABHAJI KAILASCHAND KHANDEKAR, 47 Hide Road, City of Calcutta, State of West Bengal, INDIA.	Improvements in or relating to regulators for gas cylinders.
39.	150531	19-3-1979	GIRLING LIMITED, Kings Road, Tyseley, Birmingham 11, England.	Improvements in disc brakes for railway vehicles.
40.	150532	26-3-1979	FEDERAL-MOGUL CORPORATION, 26555, Northwest Highway, Southfield, Michigan, U.S.A.	A clutch release bearing assembly.
41.	150562	22-7-1978	WESTINGHOUSE ELECTRIC CORPORATION, Westinghouse Bldg, Gateway center, Pittsburgh, Pennsylvania, U.S.A.	Apparatus for the detection of stagnant particles.
42.	150567	26-12-1978	TELEDYNE INDUSTRIES INC. 1901, Avenue of the Stars Los Angeles, California, U.S.A.	Solid impurity detector.
43.	150624	5-8-1978	SAMBHAJI KAILASHCHANDRA KHANDEKAR 47, Hide Road, City of Calcutta, State of West Bengal, India.	A driving mechanism for a pedal operated cycle Rickshaw.
44.	150635	9-1-1980	LUCAS INDUSTRIES LIMITED, Great King Street, Birmingham 19, England.	Vehicle load sensing arrangement.
45.	150636	5-3-1980	Do.	Drum brake adjuster.
46.	150638	11-6-1980	Do.	Master cylinder assembly.
47.	150662	11-4-1979	STRIKE ENGINEERING CO. LTD. No. 1, 19-10, Veno, Taito-ku, Tokyo, Japan.	Automatic control apparatus for a grain separator.
48.	150670	26-12-1979	NATIONAL DAIRY DEVELOPMENT BOARD, Kaira F 103, Anand, State of Gujarat, India.	Improvements in or relating to an apparatus for dispensing measured quantities of liquids such as milk beverages and other liquids.
49.	150673	7-7-1980	LUCAS INDUSTRIES LTD, Great King Street, Birmingham 19, England.	A piston assembly for hydraulic master cylinder.
50.	150679	23-1-1979	Hydra-Tight Ltd., Great Britain of Argyle House Bentley mill close, Walsall, West Midlands WS 2, CB 4, England.	Device for use in tightening nuts.
51.	150694	23-5-1979	ARBED S. A. Avenue de la Liberte, B. P. 1802, Luxemburg (Grand Duchy de Luxemburg)	Apparatus for cooling rolled metal products.
52.	150709	14-5-1979	SOCIETE DITE, Le Point Du Jour 44600, Saint, Nazaire France.	Air-transportable highly autonomous cross-country medical vehicle.
53.	150745	19-2-1979	ESMIL B. V. Stationsstraat 48, Amersfoort, The Netherlands.	Apparatus for performing physical and/or chemical process involving at least one liquid e. g. a heat exchanger.
54.	150748	2-5-1979	BELOIT CORPORATION, Wisconsin, U.S.A. 53511.	Apparatus for recting a plyerany or ribbons particularly from a slit paperweb onto a reel spool.

1	2	3	4	6
55.	150758	30-6-1978	HILLE ENGINEERING CO. LTD. Neepsoud Lane, Sheffield 53, 8 DL, England.	Rolling machine.
56.	150759	17-8-1978	SAINT-GOBAIN INDUSTRIES 62, Boulevard, Victor Hugo, Neuilly-Sur- Seine, Franco.	Apparatus for heat treating a fibrous mat.
57.	150779	21-5-1980	LUCAS INDUSTRIES LIMITED Great king street, Birmingham 19, Eng- land.	Automatically adjustable shoe drum brake.
58.	150815	16-1-1979	LETTERA ARABICA S. a.r. 1. Im- meuble Sohat, Route Internationals de Demas-Hazmich-Liban, B. P. 11, 2706, Beirut, Lebanon.	Apparatus for the composition of texts in arabic characters.
59.	150821	7-2-1979	ROLAND CARL ZINN, P. O. Box 463, Tesuque, New Mexico 87574, U.S.A.	Bolt and nut assembling for securing first and second members together to prevent dismantling by vandels.
60.	150822	9-2-1979	GIRLING LIMITED, Kings Road, Tyseley, Birmingham 11, England.	Improvements in fluidpressure operated brakes for vehicles.
61.	150829	4-4-1979	G. B. Societa per Agioni, Via Pomponia, 10 Bologna, Italy.	Device for forming and transferring batches of products in automatic wrap- ping machines.
62.	150889	1-9-1978	RHEINMETALL GmbH, 4, Dusseldorf, Ulmenstrasse 125, West Germany.	Sub-calibre arrow-shaped missile having a drag-stabilising rear part.
63.	150973	25-8-1981	INDIA PISTONS LIMITED, Huzur Gardens, Sembian, Madras : 600002, India.	A method of manufacturing compression rings and compression rings manufactured thereby.
64.	150986	13-6-1979	VIRGIL STARK, 936 Fifth Avenue New York 10021, U.S.A.	Solar distillation apparatus.
65.	150991	15-7-1980	HITACHI LIMITED, 5-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo, Japan.	Winding machine.
66.	151081	19-10-1978	USM CORPORATION, 426, colt High- way, Farmington, Connecticut, U.S.A.	Machine for processing viscous plastic and polymeric materials.
67.	151104	1-8-1980	RAVINDER SINGH, Y-77, Havz khax, New Delhi, 110016, India.	Improved storage container for liquified gas.
68.	151130	15-3-1979	ENVIROTECH CORPORATION 669, West Second south Salt Lake city, Utah, USA.	In a rotary vacuum filter improved means for effecting wasting of the filter cloth.
69.	151216	22-2-1979	AKTIESELSKABET NORDISKE KABEL OG TRAADFABRIKER La Cours Vej 7, DK-2000, Openhagen F, Denmark.	Machine for forming a head on a shank such as a nail or a screw.

RENEWAL FEES PAID

136849 137701 138082 138192 138202 138343 138797 139293
 139381 139544 139720 139736 140038 140103 140187 140197
 140412 140413 140491 140492 140912 141259 141316 141361
 141408 141514 141631 141815 141864 142096 142715 143162
 143265 143522 143534 143551 143588 143724 143768 143973
 144137 144181 144945 145058 145239 145275 145353 145688
 145689 145721 145792 146017 146216 146675 146699 146770
 146900 146903 147017 147083 147164 147219 147243 147304
 147307 147370 147510 147540 147562 147657 147683 147694
 147695 147735 147746 147937 148029 148054 148072 148180
 148298 148371 148408 148443 148474 148632 148677 148678
 148679 148763 148806 148911 148995 149164 149178 149301
 149480 149503 149572 149600 149625 149631 149645 149658
 149670 149832 149835 150134 150178 150182 150260 150401
 150420 150489 150524 150635 150834 150818 150929 150933
 151066 151150 151222 151258 151310 151322 151385 151417
 151622 151875 152281 152587 152928 153029 153241 153554
 153797 153798 153814 153851 153874 153949 154103 154104
 154116 154122 154146 154181 154195 154226 154256 154318
 154434 154474 154485 154538 154594 154615 154713 154717
 154718 154737 154740 154744 154838 154841 154867 154875
 154876 154888 154893 154895 154897 154898.

CESSATION OF PATENTS

145002 146124 150239 150594 153687.

REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Design Act, 1911.

The date shown in the each entry is the date of registration of the design included in the entry.

Class 1. No. 156356. Bansal Traders & Engineering Company, C-7, Wazirpur Industrial Area, Delhi, India, a Partnership firm. "Adjustable Baby Walker". 26th November, 1985.

Class 1. Nos. 155875, 155876, 155877, 155878, 155879, 155880. The Jay Engineering Works Ltd., 23, Kasturba Gandhi Marg, New Delhi-110001, India, an Indian Company. "Table Fan Guards". 23rd July, 1985.

Class. 1. No. 155881. The Jay Engineering Works Ltd., 23, Kasturba Gandhi Marg, New Delhi-110001, India, an Indian Company. "Table Fan Stands". 23rd July, 1985.

Class 3. No. 155910. Amar Nath Bansal of Mahalaxmi Toys, 30/73, Gali No. 8, Vishwas Nagar, Delhi-110032, India, Indian National. "Night Lamp". 5th August, 1985.

Class 3. No. 156055. Bansal Plastic, 3052/223, Tri Nagar, Delhi-110035, India, an un-registered Partnership firm. "Pot (Lotah)". 17th September, 1985.

Class 3. No. 155964. R. W. Simon Limited, a British Company of System Works, Hatchmoor Industrial Estate, Torrington, Devon EX38 7 HP, England. "Ventilator". Reciprocity date is 19th February, 1985.

Class 13. No. 155883. Mohan Exports (India) Pvt. Ltd., Mohan House, Zamrudpur Community Centre, Kailash Colony Extension, New Delhi-110048, India, an Indian Company. "Textile Shirt". 23rd July, 1985.

Extn. of Copyright for the Second period of five years.

Nos. 150080, 149762. Class-1.
Nos. 155748, 150319, 155449. Class-3.
No. 150265. Class 4.

Extn. of Copyright for the Third period of five years.

Nos. 143429, 155748, 155449, 143449,
1434450, 143451, 143533. Class-3.
Nos. 150265, 143452, 143453. Class 4.

Name Indexes of applicants in respect of Patent Office and its Branch Offices for the month of May, 1985 (Nos. 332/Cal/85 to 416/Cal/85, 119/Bom/85 to 141/Bom/85, 332/Mas/85 to 403/Mas/85 and 372/Del/85 to 439/Del/85).

Name	&	Appln. No.
------	---	------------

A

A, Ahlstrom Corporation.—39/Mas/85.
AEPLC.—396/Mas/85.
Abochacker, A.P.—383/Mas/85.
Agrawal, G.D.—408/Del/85.
Aktiebolaget SkF.—421/Del/85.
Alagi Allami Tangazdasag.—348/Cal/85.
Allied Corporation.—334/Mas/85.
Allied Tube & Conduiti Corporation.—352/Mas/85.
Aluminium Pechiney.—394/Cal/85, 344/Mas/85, 345/Mas/85.
Ambac Industries, Incorporated.—396/Cal/85.
Ambikadevi, N.—340/Mas/85.
Amoco Corporation.—398/Del/85, 436/Del/85.
Anand Automobiles.—379/Del/85.
Aquapore Corporation.—336/Mas/85.
Arbed S.A.—353/Mas/85.
Asahi Kasei Kogyo Kabushiki Kaisha.—354/Cal/85.
Atochem.—348/Mas/85.
Axel Johnson Engineering AB.—333/Cal/85.

Name	&	Appln. No.
------	---	------------

B

BBC Brown Boveri & Company, Ltd.—374/Mas/85.
Boc Group, Inc, The.—390/Mas/85.
Babcock & Wilcox Company The.—412/Cal/85, 413/Cal/85, 414/Cal/85, 415/Cal/85.
BA&VE, Y.S.—141/Bom/85.
Bavisi, A. N.—130/Bom/85.
Beloit Corporation.—334/Cal/85, 341/Cal/85.
Benedict, F. D.—368/Mas/85.
Bennett, B.A.—339/Cal/85.
Bharat Heavy Electricals Limited.—380/Del/85, 381/Del/85.
Bhattacharya, N. N.—338/Cal/85.
Bioresearch SpA.—345/Cal/85, 346/Cal/85.
British Petroleum Co, P.L.C. The.—386/Del/85.
British Petroleum Co, Ltd. The.—423/Del/85.
Brush Wellman Inc.—398/Mas/85, 399/Mas/85.

C

CGEE Alsthom.—387/Del/85.
Chesebrough-Ponds Inc.—438/Del/85.
Chhabra, J. R.—404/Del/85.
Chief Controller Research & Development, The.—406/Del/85, 409/Del/85.
Choudhary, S. (Dr.).—413/Del/85.
Ciba-Geigy AG.—391/Del/85.
Colgate-Palmolive Company.—437/Del/85.
Combustion Engineering, Inc.—368/Cal/85, 402/Cal/85, 406/Cal/85.
Compair Broomwade Ltd.—429/Del/85.
Control Components Inc.—399/Del/85.
Council of Scientific and Industrial Research.—394/Del/85, 400/Del/85, 401/Del/85, 402/Del/85, 403/Del/85, 430/Del/85.

D

Daszinnies, I.—392/Del/85.
Degussa Aktiengesellschaft.—335/Cal/85.
Dennison Manufacturing Company.—375/Del/85, 376/Del/85, 377/Del/85, 378/Del/85.
Desai, N. N.—127/Bom/85.
Desouza, A.—121/Bom/85.
Deutsche Texaco AG.—369/Mas/85.
Development Finance Corporation.—357/Cal/85, 363/Cal/85.
Devney, D.W.J.—408/Cal/85.
Devney, D.W.I.—408/Cal/85.
Devney, L.F.D.—408/Cal/85.
Didier Engineering, GmbH.—384/Del/85.
Dietrich, F.—425/Del/85.
Dow Chemical Company, The.—401/Mas/85.
Draper Development Corporation Pty. Ltd.—433/Del/85.
Durametall Corporation.—378/Cal/85.

Name & Appln. No.	Name & Appln. No.
E	
E. Du Pont De Nemours and Company.—383/Cal/85, 401/Cal/85, 405/Cal/85.	Jacob Manufacturing Company, The.—411/Cal/85.
Energy Conversion Devices, Inc.—388/Del/85.	James Howden & Co. Ltd.—385/Del/85.
Ethicon Inc.—376/Cal/85.	K
Etto, X.F.—388/Cal/85.	Kmkkarl Magerle Lizenz AG.—347/Mas/85.
Eutetic Corporation.—360/Mas/85.	Kenrich Petrochemicals Inc.—389/Del/85.
Everkleen Sanitary Products Pvt. Ltd.—405/Del/85.	Knorad Rosenbauer KG.—361/Cal/85.
Exxon Research and Engineering Co.—395/Del/85.	Knorr—Bremse GmbH.—340/Cal/85.
F	Korf Engineering GmbH.—400/Cal/85.
Farstad, O.—357/Mas/85.	Koshy, I.—339/Mas/85.
Firestone Tire & Rubber Co, The.—393/Del/85.	Kraftwerk Union Aktiengesellschaft.—349/Cal/85
Firmenich SA.—427/Del/85.	Krishnamurty, V.—338/Mas/85.
Fista Chemicals AG.—378/Mas/85.	Kronos, Inc.—424/Del/85.
Fluor Corporation.—379/Cal/85.	Kulkarni, P.K.—133/Bom/85.
Fonseca, E.—388/Cal/85.	Kulkarni, V. P.—133/Bom/85.
Franz Plasser Bahnbaumaschinen-Industriegesellschaft M.B.H.—358/Cal/85.	Kyorin Pharmaceutical Co. Ltd.—381/Mas/85.
G	L
Gane Villamossagi Muvek.—412/Del/85.	Larsen & Toubro Ltd.—134/Bom/85.
Gea Luftkuhl Ergesellschaft Happel GmbH & Co.—373/Cal/85.	Lempert, D.A.—415/Del/85.
Gum Base Co. S.P.A.—403/Cal/85.	Lucas Industries Public Limited Company.—385/Mas/85.
Gupta, B. K.—439/Del/85.	M
Gustav Schade Maschinenfabrik GmbH & Co.—398/Cal/85.	MS International Plc.—410/Cal/85.
H	MTA Termesztudományi Kutató Laboratoriumai.—348/Cal/85.
Hagan, R. J.—415/Del/85.	Mahajan, C.—390/Del/85.
Harsco Corporation.—372/Cal/85.	Mahindra Owen Ltd.—119/Bom/85.
Hindustan Lever Ltd.—125/Bom/85, 126/Bom/85.	MCGAW—Edison Company.—416/Cal/85.
Hitchiner Manufacturing Co. Inc.—365/Mas/85, 403/Mas/85.	Mechanical Technology Incorporated.—372/Del/85, 373/Del/85, 374/Del/85.
Hoechst Aktiengesellschaft.—371/Cal/85, 387/Mas/85.	Mechag, Private Limited.—341/Mas/85.
Hoechst India Ltd.—122/Bom/85.	Medical Technology Corporation.—388/Mas/85.
Hoof, E. V.—393/Cal/85.	Medscan B.V.—347/Cal/85.
Hook, T. A.—397/Del/85.	Metal Box P.L.C.—349/Mas/85, 355/Mas/85.
Hybritech Incorporated.—360/Cal/85.	Metallgesellschaft Aktiengesellschaft.—369/Cal/85, 377/Cal/85.
I	Mitsui Toatsu Chemicals, Incorporated.—397/Cal/85.
India Explosives Limited.—343/Cal/85, 344/Cal/85.	Mobil Oil Corporation.—361/Mas/85, 366/Mas/85, 367/Mas/85, 384/Mas/85, 386/Mas/85.
Indian Institute of Science.—371/Mas/85.	Moorjani, B. S.—139/Bom/85.
Indian Petro-Chemicals Corporation Ltd.—136/Bom/85.	N
Institut Francais Du Petrole.—135/Mas/85.	Nabisco Brands, Inc.—370/Cal/85, 399/Cal/85.
Intech Systems Corporation.—350/Mas/85.	Nair, K. P. R.—120/Bom/85.
International Standard Electric Corporation.—371/Mas/85.	Narain, J.—419/Del/85.
Isolite Babcock Refractories Co Ltd.—359/Cal/85.	National Aeronautics and Space Administration.—332/Cal/85.

Name & Appln. No.

National Research Development Corporation.—410/Del/85.
 Nauchno-Proizvodstvennoe Obiedinenie Kamen I Silikaty.—391/Cal/85.
 Nippon Chemphar Co. Ltd.—382/Mas/85.

O

Oil & Natural Gas Commission.—407/Del/85.
 Oronzio Be Nora Impianti Elettrochimici.—135/Bom/85.

P

P. L. Smidth & Co.—337/Mas/85.
 Palnitkar, G.P.R. (Dr).—355/Mas/85.
 Pathak, S. N.—123/Bom/85, 129/Bom/85.
 Pedersen, J.—411/Del/85.
 Pfister, GmbH.—389/Mas/85.
 Pfizer Inc.—434/Del/85.
 Phillips Petroleum Company.—336/Cal/85.
 Planorg Mernoki Iroda GM.—385/Cal/85.
 Pyrament, Inc.—428/Del/85.

R

Rabe, E.—426/Del/85.
 Ramesh, R. V.—388/Cal/85.
 Rao, E. G. K.—358/Mas/85.
 Ross, M. I.—395/Cal/85.
 Ross, M.A.—342/Mas/85.
 Ruhrtal—Elektriziti Tatgesellschaft Hartig GmbH & Co.—367/Cal/85.

S

S. A. R. L. Linde Froid Ft Climatisation.—362/Cal/85.
 SKW Trostberg Aktiengesellschaft.—364/Cal/85.
 Saab Marine Electronics Aktiebolag.—379/Mas/85.
 Santa Barbara Research Center.—418/Del/85.
 Santrade Limited.—137/Bom/85.
 Satardekar, V. D.—131/Bom/85.
 Schlotter, G. (Mrs.).—392/Cal/85.
 Schlumberger Limited.—400/Mas/85.
 Sen, G. (Smt.).—352/Cal/85.
 Sen, N.—352/Cal/85.
 Shah, M. R.—140/Bom/85.
 Shankhayan, S. D.—416/Del/85.
 Shell Internationale Research Maatschappij B.V.—375/Mas/85, 393/Mas/85.
 Sherritt Gordon Mines Ltd.—422/Del/85.
 Siemens Aktiengesellschaft.—342/Cal/85, 353/Cal/85, 355/Cal/85, 407/Cal/85.
 Snamprogetti S.p.A.—376/Mas/85.
 Societe Nationale Ele Aquitaine.—382/Del/85, 383/Del/85.

Name & Appln. No.

Societe Nationale Industrielle Aerospatiale.—435/Del/85.
 Solomon, F. D.—409/Cal/85.

Sous, Trilants Arrondissement Dieppe, S.T.A.D.—404/Cal/85.
 Stahl Chemical Industries, B. V.—373/Mas/85.
 Stahlwerke Peine Salzgitter, AG.—384/Del/85.
 Stamicarbon, B. V.—332/Mas/85, 333/Mas/85.
 Standard Manufacturing Co.—366/Cal/85.
 Stein Industrie.—431/Del/85, 432/Del/85.
 Stratoflex, Inc.—364/Mas/85, 370/Mas/85.
 Sudo, M.—346/Mas/85.
 Sulzer Brothers Ltd.—337/Cal/85, 350/Cal/85.
 Sunpra Energy & Recovery Engineering Pvt. Ltd.—132/Bom/85.
 Svenson, S.—389/Cal/85.
 23 Szamu Allami Epitoipari Vallalat.—380/Mas/85.

T

T.P.O. "Pharmachim".—351/Mas/85.
 Tata Engineering & Locomotive Co. Ltd.—138/Bom/85.
 Tata & Lyle Public Limited Company.—392/Mas/85.
 Tea Technocrats, The.—386/Cal/85.
 Tea-Ma Consortium India Limited.—387/Cal/85.
 Thadani, S. C.—128/Bom/85.
 Thames Water Authority.—356/Mas/85.
 Thyssen Stahl, AG.—364/Cal/85.
 Toyo Engineering Corporation.—397/Cal/85.
 Toyota Jidisha Kabushiki Kaisha.—359/Cal/85.

U

UOP Inc.—420/Del/85.
 Union Carbide (I) Ltd.—384/Cal/85.
 University of Southampton.—351/Cal/85.
 Uponor AB.—343/Mas/85.

V

Varghese, W.—124/Bom/85.
 VEB Kombinat Nagema.—371/Cal/85, 382/Mal/85.
 Veb Stahl-Und Walzwerk.—381/Cal/85.
 Velsicol Chemical Corporation.—396/Del/85.
 Vijayan, T.A.P.—397/Mas/85.
 Voest-Alpine Aktiengesellschaft.—400/Cal/85.
 Vsesojunzny Nauchno-Issledovatelsky I Konstruktorsky Institut PO Oborudovaniju Dlya Shinnoi Promyshlennosti "Niishinmash".—390/Cal/85.

<i>Name</i>	&	<i>Appln. No.</i>	<i>Name</i>	<i>Appln. No.,</i>
W			Z	
W.L. Gore & Associates, Inc.—394/Mas/85, 395/Mas/85.			Zellweger Uster Ltd.—362/Mas/85, 363/Mas/85.	
Wakuta, K.—377/Mas/85.			Zentrales Warenkontor Obst, Gemüse Und Speisekartoffeln.—	
Washington University.—375/Cal/85.			365/Cal/85.	
Wella Aktiengesellschaft.—380/Cal/85.				
Westinghouse Electric Corporation.—356/Cal/85.				
Westinghouse Electric Corporation.—356/Cal/85.				
White Consolidated Industries, Inc.—417/Del/85.				
Wilson, A. L.—354/Mas/85.				
Worldwise Solar Group Pty. Ltd.—402/Mas/85.				

R. A. ACHARYA
Controller General of Patents, Designs
and Trade Marks